WETLAND DELINEATION / DETERMINATION REPORT COVER FORM

A complete report and signed report cover form, along with applicable review fee, are required before a report review timeline can be initiated by the Department of State Lands. All applicants will receive an emailed confirmation that includes the report's unique file number and other information.

Ways to submit report:

Under 50MB - A single unlocked PDF can be emailed to: wetland.delineation@dsl.oregon.gov.

- 50MB or larger A single unlocked PDF can be uploaded to DSL's Box.com website. After upload notify DSL by email at: wetland.delineation@dsl.oregon.gov.
- OR a hard copy of the unbound report and signed cover form can be mailed to: Oregon Department of State Lands, 775 Summer Street NE, Suite 100, Salem, OR 97301-1279.

Ways to pay review fee:

- By credit card on DSL's epayment portal after receiving the unique file number from DSL's emailed confirmation.
- By check payable to the Oregon Department of State Lands attached to the unbound mailed hardcopy <u>OR</u> attached to the complete signed cover form if report submitted electronically.

Contest and Authorization Information				
Contact and Authorization Information	Dusings above # (500) 000 4944			
Applicant Owner Name, Firm and Address:	Business phone # (503) 663-4844			
Ted Sester, T & K Sester Family, LLC	Mobile phone # (optional) (503) 351-8954			
24200 SE Highway 212 Damascus, OR 97089	E-mail: ted@sesterfarms.com			
Daniascus, ON 97009				
	: Business phone # (503) 452-5561			
	Mobile phone # (optional) (503) 522-7880			
Paul M Trone, EVREN Northwest, Inc. PO Box 14488	E-mail:			
Portland, Oregon 97293	pault@evren-nw.com			
I either own the property described below or I have legal authority	to allow access to the property. I authorize the Department to access the			
property for the purpose of confirming the information in the report, after prior notification to the primary contact.				
Typed/Printed Name: Ted Sester	Signature: And Sester			
Date: 12/10/2024 Special instructions regarding s				
Project and Site Information				
Project Name: Gramor Parcel	Latitude: 45.418659N Longitude: -122.418580E			
Project Name. Granion Farcei	decimal degree - centroid of site or start & end points of linear project			
Proposed Use:	Tax Map #T2SR3E S03			
Low-level pesticide impacted topsoil imported from the Bull Run	Tax Lot(s) TL03302			
Filtration Facility will be blended with virgin topsoil at the site and	Tax Map #			
used to cultivate rotational grass and nursery stock crops.	· ·			
Project Street Address (or other descriptive location):	Tax Lot(s) Township 2S Range 3E Section 3 QQ SW/SE			
North side of Highway 212 approximately 1.75 miles east of Damascus, Oregon	Township 20 Traings 32			
	Use separate sheet for additional tax and location information			
City: Damascus County: Clackamas	Waterway: River Mile:			
Wetland Delineation Information				
Wetland Consultant Name, Firm and Address:	Phone # (206) 595-7581			
Rone Brewer Mobile phone # (if applicable)				
Sound Ecological Endeavors, LLC	E-mail: rbrewer@soundeco.net			
19325 32nd Ave NW Stanwood, WA 98292				
The information and conclusions on this form and in the attached report are true and correct to the best of my knowledge. Consultant Signature: 12496cla-c4ec-4bc6-9c5d-1191b672a443 Date: 12/10/2024				
10000000	Consultant Applicant/Owner Authorized Agent ea size: 29 acres Total Wetland Acreage:			
	rea size: 29 acres Total Wetland Acreage:			
Check Applicable Boxes Below				
R-F permit application submitted	Fee payment submitted \$ 100			
☐ Mitigation bank site	Resubmittal of rejected report (\$100)			
EFSC/ODOE Proj. Mgr:	Request for Reissuance. See eligibility criteria. (no fee)			
Wetland restoration/enhancement project (not mitigation)	DSL# Expiration date			
Previous delineation/application on parcel	LWI shows wetlands or waters on parcel			
If known, previous DSL #	Wetland ID code			
For Office Use Only				
DSL Reviewer: Fee Paid Date:				
	DSL App.#			
Date Delineation Received://	DOL 7/pp.#			

WATERS AND WETLANDS

Gramor Property
Map and Tax Lot T2SR3E S03 TL03302
Damascus, Clackamas County, Oregon
Parcel No.: 00603617
Approx Lat ~45.418659N; Long -122.418580E

Prepared for: T & K Sester Family, LLC 24200 SE Highway 212 Damascus, Oregon

Prepared by:

Sound Ecological Endeavors, LLC. 19325 32nd Avenue NW, Stanwood, WA 98292



December 05, 2024

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Waters/Wetlands Determination Gramor Property, Damascus, Oregon

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Appendix A – Corps Routine Wetland Delineation Forms

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1.0 INTRODUCTION AND APPROACH

T&K Sester Family, LLC (Client) contracted Sound Ecological Endeavors (Sound Eco) and EVREN Northwest, Inc. (ENW) to conduct a Waters and Wetland Identification and Delineation (i.e., a Determination) for the 28.67 acre subject Gramor site located on the north side of Highway 212 between SE 222nd Drive to the west and SE 242nd Avenue to the east in Damascus, Clackamas County, Oregon (subject property; T2S,R3E,S3-WM; Clackamas County parcel 00603617; Figures 1 and 2). The small cities of Damascus, Oregon, is located approximately 1 ¾ miles to the west, and Boring, Oregon, is located approximately 2 miles to the east.

This investigation and reporting were conducted per voluntarily provided access to private property for the specific purpose of most possible accurate Identification and Delineation (i.e., Determination) of specific Federal and State statutorily defined and thus "protected" Waters conditions/features (including Wetlands; Clean Water Act [CWA], 33 U.S.C. §1251 et seq. as amended) (Sackett v USEPA, 2023; U.S. Army Corps of Engineers [Corps] v. Hawkes Co., Inc., Et al., 2016; Boucher v. United States Department of Agriculture, 2019). Then these statutorily protected conditions were distinguished from unprotected, unregulated, or clearly statutorily-consistent otherwise regulated conditions (UUORCs). The statutory and administrative ORCs are distinguished as they may be appropriately managed in the protection of persons, property, and the environment.

Nonwetland Waters (plural intentional; see Sackett v USEPA, 2023) were identified as being Relatively Permanent, thus present at least three months after the rainy season ends, also with bed and banks expressing an ordinary high water mark (OHWM), resulting from the prolonged and active presence of standing or flowing water. Wetlands, as Waters, were Determined in accordance with the U.S. Army Corps of Engineers (Corps) Wetland Delineation Manual (Corps 1987) Tri-Parameter requirements as supplemented by the Western Mountains, Valleys, and Coast Regional Supplement (Corps 2010; combined and referred to herein as the "Corps Manual"). As these guidance documents do not necessarily reflect statutory authority via acceptance through the Administrative Procedures Act (APA; Appalachian Power Co., et al., v. U.S. Environmental Protection Agency [USEPA], 2000), herein, they were carefully implemented as interpreted to the legal Regulatory Wetland definition (42 Fed. Reg. 37, 125-26, 37128-29; July 19, 1977 as reiterated by Oregon Revised Statutes [ORS] 196.80[16]), in most salient part being:

"...a prevalence of vegetation typically adapted to life in saturated soil conditions."

With Waters protected and statutorily consistent regulated conditions (e.g., Nonpoint Source Stormwater [NpSS]) appropriately managed, then, unprotected, unregulated, or merely administrative/policy conditions and conditioning remain, which conditions and conditioning often include maintenance of natural vegetation. But when based upon arbitrary functions developed from best available science selected per capricious individual values, administrative regulations become excess of law, to be severed from justification for statutory private property takings, including condemnation for public benefit.

This report presents results from both August 13, 2024 site visit, which was purposefully focused only on the area of proposed agricultural farm soil addition/enhancement (Figure 3), and a December 5th and 6th, 2024 site visit to better evaluate site hydrology during the more-appropriate, albeit, early wet season. In being best determined during the early growing season (February-April), Regulatory Wetland hydrology for the subject property

may require further analysis at that time. Therefore, this Wetland identification and delineation (i.e., Determination), while interpreted to be representative of regulatory conditions, and as may be voluntarily agreed to by the property owner, should be considered preliminary in nature until DSL review, and then possibly until in-situ measurement of specific conditions as become necessary and/or are requested by the property owner in representation and establishment of property rights.

2.0 METHODS AND REGULATORY INTERPRETATION

Sound Eco and ENW provide site history and land use/alteration information as such background information aids in understanding historic land use and alterations to the land and landscape. Additional information is provided as to differentiating different types of Waters and all branches of wetland science.

Prior to the site visit Sound Eco examined readily-available information such as:

- Mid to late 1800s Government Land Office original land survey maps
- U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) maps and protected species listings.
- U.S. Department of Agriculture (USDA) Natural Resource Conservation Service's (NRCS's) soil type maps (Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm; also available as Google Earth overlay).
- National Oceanic and Atmospheric Administration (NOAA) Fisheries Protected Species information.
- Oregon Department of Fish and Wildlife (ODFW) Protected Species Information.
- Oregon Statewide Waters/Wetlands Mapping.
- Portland Metro Title 13 mapping.
- Clackamas County Comprehensive Plan Environmental mapping; and
- Clackamas County Significant Environmental Concern (SEC) zoning overlays.
- Topographic maps including Light Detection And Ranging (LiDAR), as readily-available.

Most of this documentation is not statutorily binding, merely inaccurately suggesting possible presence of statutorily-defined protected features or ORCs that may be on or in vicinity to the subject property. As an example, of specific note, Oregon Department of State Lands (DSL) presents within its Wetland Mapping Standard (2010) that all State, County, and City landscape-based wet land mapping shall be in accordance with the Federal Geographic Data Committee (FGDC, 2009) mapping standard, most often in address of meeting grant funding conditions. These 2009 Federal Mapping standards were updated in 2013, and the new introductory sections of this documentation plainly provide that the methods are based on the Cowardin (1979) "biological" wet-land classification system (also known as the USFWS NWI). The FGDC (2013) also plainly state that their prescribed methods are not regulatory in nature,

"The FGDC Wetlands Classification Standard is neither designed, nor intended, to support legal, regulatory, or jurisdictional analyses of wetlands mapping products, nor does it attempt to differentiate between regulatory and nonregulatory wetlands." (emphasis added),

and admittedly do not necessarily meet the Corps Tri-Parameter requirements. Further, the Cowardin NWI and thus likely all approved Oregon wet-land mapping standards rely primarily on the presence of USFWS listed wet-land vegetation which by definition predominantly may or may not grow in Regulatory Wetlands. Such Facultative vegetation plainly then do not require and are not typically adapted to saturated soil conditions. Therefore OAR 141-086 Wetland Mapping Standard is not necessarily consistent with therein cited statutory wetland definition (ORS 196.800[16]). While the Corps Routine Wetland Determination methods and Data Forms also rely upon this same vegetation listing and classification system, in order to be representative of the Wetland plant

parameter under the Regulatory Wetland condition, all Wetland vegetation shall be interpreted to individual site-specific plant adaptation to saturated soil conditions, in being the equivalent of Obligate-Wetland plants.

Interpretation of listed potential Regulatory Wetland vegetation to saturated soil conditions shall also be necessary because Wetlands by definition are both protected Waters and protected or Critical Habitat. If the listed plant species are simply included as a whole in Determining a wetland boundary, regardless of soil saturation, then the resulting area of Protected Critical Habitat will exceed the area of saturation, or may not contain soil saturation at all. The regulatory protection of private property based on such non-saturated conditions would seem to become a taking, based on application of habitat or "ecological connections" associated with the now disallowed significant nexus concept (Sackett v. USEPA, 2023; Solid Waste Agency of Northern Cook County [SWANCC] v. U.S. Army Corps of Engineers, 2001).

Protected Surface and Ground Waters including Wetlands, were those identified first as not being solely precipitation-based, and thus displaying relatively permanency (Sackett v U.S. Environmental Protection Agency, 2023). Relative permanency is defined as existing at least seasonally (three months) after the rainy season (i.e., after surplus soil water begins to decrease). Relative permanency requires stored water sources to maintain presence, such as glaciers, snowpack, lakes, and/or Groundwaters all supporting stream initiation (headwaters) or minimum base-presence and/or base-flows. Waters also include a pressure surface or "Water Table" that remains equivalent to atmospheric pressure, also with increasing pressure at depth, both remaining present after precipitation stops. These considerations eliminate application of the now defunct significant nexus concept indication of protected waters but thus well-provide distinction between protected waters and potentially otherwise regulated water (lack of plural intentional) such as statutorily-defined Point Source Stormwater (PSS) and Nonpoint Source Stormwater (NpSS).

Intermittent Waters are not well defined, and thus often present a "catch-all" for nearly any water. However, in being relatively permanent, they must have at least a 3 month, or seasonal presence, outside of the rainy season.

Plainly, relatively permanent and thus not solely-precipitation-based, pressurized and thus non-gravitational "Waters" (i.e., a Water Body or Water Bodies) are protected in any jurisdiction, and solely-precipitation-based gravitationally vertically-driven water is not protected, but may be managed. Such water may be unprotected, may also be unregulated, or may represent an otherwise regulated condition (i.e., an ORC or e.g., NpSS), which is to be managed, but not protected, as it does not warrant a taking nor condemnation of private property.

Lakes, Ponds, and Streams (including Rivers, Creeks, and other protected Watercourses), and Groundwaters/Aquifers were identified per the above considerations, in light of Hawaii Wildlife Fund V. County Of Maui, 2019, and also having bed, banks and bottoms formed by the movement of water, which most often can be bounded or delineated at an Ordinary High Water Mark (OHWM).

Wetlands were determined by using Corps Routine Wetland Indicators, interpreted to the presence of all three requisite "parameters" (the Tri-Parameter Method), including dominant presence of the equivalent of Wetland-specific "Obligate-Wetland" Vegetation and current/recent presence of anaerobic and reducing Hydric Soil conditions, both occurring as a result of relatively permanent saturated soil hydrology resulting from a pressurized water table (i.e., a Groundwater Body) within 12 inches below the ground surface (bgs), or Groundwater extending to or above the ground surface forming shallow Relatively Permanent Surface Water Body (also having underlying saturated soil

conditions). These Wetland Determination criteria are necessarily consistent with the regulatory Wetland definition.

Wetlands are unique not only in being Groundwaters interacting with and creating Surface Waters but also in being a rare and therefore protected Critical Habitat with a distinct federal "no-net loss" mandate. However, just as for other statutorily protected species and their Critical Habitat, all Critical Habitat is to be bounded by the presence of distinctly protected species (Weyerhaeuser Co. v. USFWS, 2018), for Wetlands being the dominant presence (or prevalence) of an equivalent of Wetland-Obligate Plants, typically adapted to life in Saturated Soil conditions. Facultative-Wetland and Facultative species listed on the Corps "Wetland Plant List" are NOT necessarily so typically adapted, but rather, individual plants within these listed species "might" be genetically resilient and adaptable to the Saturated and therefore anaerobic and reducing Hydric Soil conditions. Only those individual Facultative-Wetland and Facultative plants documented as so adapted at a given property are considered the equivalent of listed Obligate-Wetland plants.

With all requisite Wetland conditions being predicated upon a saturated and thus pressurized matrix (i.e., the requisite condition of Groundwaters), the measure of either in-situ percent soil saturation and/or water pressures in shallow subsurface matrix (root zone; less than 12 inches below the ground surface [bgs]) and/or of electrochemically reduced soils are the most appropriate direct measures for verification of Routine Wetland Indicators and thus, of Regulatory Wetland presence. Per past soil mineralogical testing of metamorphic-origin Wetland soils (data available upon request), Sound Eco notes the naturally-occurring presence and weathering of reduced iron in native mineral soil particles, which dictates that alpha, alpha-dipyridyl is not necessarily considered to be an accurate representation of reduced/Wetland hydric soil presence. Experience with such in-situ measures allows more accurate interpretation of Routine Wetland Indicators as representative of statutorily defined Wetland conditions.

Landscaped-based mappings such as Portland Metro's Title 13 and Multnomah County's Comprehensive Planning/zoning maps are administratively, and thus not statutorily, incorporated into County and City Comprehensive Planning environmental codes, often implemented under the guise of State's Rights, County and City "Home Rule", or even touted as Rights of Individual Citizens which including Agency "expert" personnel. But such expansion of administrative authority beyond statute has recently been decided by the Supreme Court of the United States (SCOTUS) as certainly subject to strict judicial review (Loper Bright Enterprises Et Al. v. Raimondo, Secretary Of Commerce, Et Al., 2024).

Judicial review is intended to control the administrative manipulation of UUORCs into justification for takings and/or condemnation. It also reduces overprotections of applying arbitrary ecological Functions selected in address of capricious individual "Values" presented by the public or applied by agency experts. A basis in arbitrary Functions and capricious Values, combined with a capricious "no-risk" interpretation of Best Available Science (BAS), perpetuating association without causation. This results in environmental enforcements based on purported existential environmental threats. Then justification turns to climate resiliency which has no specific endpoints, thus furthering the arbitrary and capricious rationale for the no-risk thresholds an indistinct science for protection of ecological Functions and Values (i.e., services) that may not apply next year if the weather changes, all of which can be merely reinterpreted, seemingly at random, because it is not statutory in nature. Any such arbitrary and/or capricious findings shall be severed from the factual findings in this report.

Sound Eco distinguishes statutory protection from ORCs, particularly regulating and/or appropriately managing statutorily-consistent regulated conditions such as PSS and

NpSS, per application of established regulatory criteria, including Best Management Practices (BMPs), Best Available Technology (BAT), All Known and Reasonable Technology (AKART), and the reasonable balancing of statutorily-consistent versus administratively preferred, grant funding conditioned, cornucopia of arbitrary and capricious Ecological Services incorporated into Beneficial Use prioritization.

It is only with such distinguishing between various protected and ORCs that full disclosure can be provided for a private property owner, usually required of enforcement agencies, as justification for probable cause determinations and associated enforcement actions. The lack of full disclosure by agencies, including Counties and Cities is particularly troubling, as the private property owners are not informed as to what non-statutory protections they are voluntarily complying with and thus agreeing to the taking and/or condemnation of their property use and access with inappropriate establishment of investment-backed expectations via incorrect administrative/agency environmental mapping by administratively trained or instructed and thus purported agency experts.

The boundaries of statutorily defined and thus to be protected conditions were specifically documented or at least interpreted as closely as possible per property owner's scope for factual data collection, data quality, reliability, and applicability. The primary (or principle) ecological functions (or services) of any protected conditions were established as necessary, being those unique to the established statutorily protected conditions. Then, any subsidiary or administratively alluded functions and values to which the property owner may voluntarily comply (or not?), were considered in light of the distinguished ORCs, as their protection or management may reduce likely non-natural harms to onsite and nearby adjacent/downgradient protected persons, protected private property, and the protected environment. Protected conditions are plainly defined, while ORCs are "regulated" or managed to the extent of reasonable and prudent alternatives, which may or may not be preservation, restoration, or creation of natural conditions.

3.0 RESULTS AND DISCUSSION

Sound Eco provides notable, often more comprehensive detail of site conditions, because it is through oversimplification and lumping of conditions, functions, processes, and or services, that administrative protections and regulation exceed statutory authority.

3.1 LANDSCAPE SETTING AND LAND USE

The subject property is zoned for Exclusive Farm Use (EFU) and is currently being prepared to cultivate rotational crops of grass seed and nursery stock by Client. Surrounding properties are residential, agricultural, and commercial in use. The property spans a topographic divide between the Noyer Creek Watershed to the northeast/east and the Richardson Creek Watershed to the southwest.

Historical Use. The subject site likely was originally cleared in the mid to late 1800s given charcoal noted at up to 20 inches below the ground surface (bgs), and was again most-recently occupied by forestland until 2005 when it was cleared, stumps removed, and the stump-holes filled/levelled. Since then, the site has primarily remained an infrequently worked fallow field, fully tilled in 2008, mowed and at least partially planted in the early 2010s. It was fallow from 2015 to 2020, at which time it was completely mowed, and remained fallow until recent tilling and preparation for receiving soil enhancements from the Portland Water Bureau's planned infiltration facility.

Geologic Setting and Soils. The site is located in the Portland Basin, a low-lying area between the Oregon Cascade Range to the east and the Portland Hills and Tualatin Mountains to the west. The Columbia and Willamette Rivers are the principal rivers within the basin.

The site is located near the northeastern margin of the basin between Johnson Creek to the north and Clackamas River to the south, named the "central domain" by Madin (1994), which is dominated by conical to elongate hills known as the Boring Hills. Doubly plunging folds, fault-bounded folds, or fault blocks comprise the structure of the Boring Hills. While Boring Lava flows or vents are almost exclusively associated with the folded and faulted hills, most of the Boring Hills consist largely of sedimentary rock. Boring Lava occurs along the flanks of the hills. Thus, it appears that Boring Lava erupted from vents along the fault lines.

The site is mapped as Quaternary (Pleistocene to Pliocene) Springwater Formation (QTs), which is described as fluvial conglomerate, volcaniclastic sandstone, siltstone, and debris flows derived from the Cascade Range to the east. The conglomerate is massively and profoundly weathered red, brown, gray-green and orange and moderately indurated. Clasts are well-rounded pebble to boulder-sized basalt, andesite and dacite rock, with rare exotic Columbia River provenance metamorphic and plutonic rock compositions. Feldspathic, volcanic lithic, and vitric sediments comprise the conglomerate's silt and sand matrix. Angular to rounded basalt, andesite and dacite lava, scoria, and pumice in a clay, ash and sand matrix comprise debris flow materials. Quartzofeldspathic silt, ash and clay materials comprise siltstones and mudstones. The base of the Springwater Formation is

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¹ Madin, I.P., 1994, *Geology of the Damascus Quadrangle, Clackamas and Multnomah Counties, Oregon*: Oregon Department of Geology and Mineral Industries Geologic Maps Series GMS-60, 1:24,000.

conformable with conglomerates and volcaniclastic sandstones of the Pliocene to Miocene Troutdale Formation.

According to the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (WSS), 83% of the site area is mapped as Bornstedt silt loam (8B), while the remaining 17% of area is mapped as Delena silt loam (30C).

Bornstedt silt loam is listed as nonhydric, occuring on 0-6% slopes, is moderately well drained, has a Ksat of 0.06 to 0.20 inch per hour (in/hr.), and has the following profile: H1: 0- to 8-in silt loam, H2: 8- to 33-in silty clay loam, and H3: 33- to 71-in silty clay. Estimated depth to ground water is 24- to 36-in, and depth to a restrictive feature is greater than 80-in. Bornstedt soils are not listed hydric.

Delena silt loam occurs on 3-12% slopes, is poorly drained, has a Ksat of 0.0 to 0.06 in/hr., and has the following profile: H1: 0- to 12-in silt loam, H2: 12- to 25-in silty clay loam, and H3: 25- to 60-in silty clay loam. Estimated depth to ground water is 0- to 18-in, and depth to the fragipan is 20- to 30-in. Delena Silt Loams are listed hydric.

Topography. The subject property is located within the US Geological Survey Damascus, OR 7.5-minute quadrangle, at an approximate elevation of between 585 and 620 feet above mean sea level (see Figure 1). The subject property slopes gently to the north. The slope is relatively consistent at about 4 percent with a slight bench and gentle slope to the south beginning within approximately 100 meters north of Highway 212.

Regional Ecology. The climate of the region is typical of the Pacific Northwest interior. It is characterized by a long, cool, rainy season from October to May, and a short, warm, dry season from June to September. The transition between these two seasons is gradual. The climate is influenced primarily by prevailing westerly winds that carry moisture from the Pacific Ocean and provide the coast with abundant rainfall. A persistent offshore high-pressure system blocks most maritime frontal systems from entering the area during the summer months. During the winter, however, this high moves southward to the coast of California and consequently has minimal effect on the movement of Pacific frontal systems.

The Cascade Mountain Range to the east blocks most continental weather, including winter storms that are common west of the Continental Divide. However, occasional influxes of cold air from the north penetrate the Willamette Valley through the Columbia Gorge. Temperatures in the area seldom exceed 90°F or fall below 0°F. Rainfall averages approximately 40 inches annually and occurs primarily between October and March.

Historically, the region was dominated by evergreen forests with a limited understory. Riparian areas along streams and rivers and naturally disturbed areas (e.g., landslides) were mixed with deciduous/evergreen forests with dense understory and herbaceous layers. Other than disturbed and or riparian/moist soil habitats, the mature undisturbed coniferous habitats supported a stable but relatively limited assemblage of plant, invertebrate, reptile, amphibian, bird, and mammal species. Anthropogenic disturbance over time have increased overall species diversity, but also have limited some species, especially those particularly dependent on specific mature habitats such as coniferous forests.

Currently, the region contains remnant or second growth patches of evergreen forest outside of urban and suburban limits, and small "hobby" farms and agricultural fields and pastures dominate the landscape. While these ecosystems may support an array of plants, invertebrates, birds and mammals, and many of these may be abundant, the species composition is generally different than that present within mature native or natural successional habitats. Representative regional fauna may include:

- Numerous invertebrate species.
- A few frog, salamander, and snake species.
- Song and perching birds, woodpeckers, grouse, waterfowl, piscivorous birds such as herons or kingfishers, scavengers such as crows and vultures, and raptors such as owls, hawks, and eagles.
- Small mammals such as voles and deer mice, medium bodied mammals such as raccoons, skunks, and opossum, and large mammals such as deer, cougars, or black bear. Wolves have been reintroduced into the state and it is possible they are present in the region.
- Large Mammals such as deer.

However, other than those species particularly suited or accustomed to agricultural, suburban, or urban ecosystems, populations of native wildlife are limited and isolated by the fragmentation of suitable historic mature habitat. This fragmentation is alleviated to some extent nearing the Cascade foothills to the east, where the agro-ecosystems give way to primarily second or third growth coniferous forests.

The Gramor subject property is located on the edge of the urban portion of the small town of Damascus. Surrounding properties include forested, agricultural, small farm, and rural residential.

Site Ecology. Site features are illustrated in Figure 2. The 28+ acre site was completely cleared and leveled and tilled in 2005 and has been intermittently mowed and tilled since. The property currently is early successional grasses (predominantly vernal grass which may have been planted), flowering weedy species, and weedy or native shrubs including a large predominance of Himalayan Blackberries. A few young conifers, black cottonwood, and pussy willow trees are scattered across the property.

A non-channelized swale exists along or near the property northern boundary. This swale collects ephemeral Nonpoint Source Stormwater (NpSS), which, at some depth flows southwest onto and across the adjacent property, eventually reaching Richardson Creek over half a mile downgradient. Very little to no runoff reaches Noyer Creek. A small portion of site runoff is collected in the Highway 212 roadside Point Source Stormwater Conveyance (ditch). Typical moist soil vegetation exists in the lower portion of the swale at the subject property northwest portion.

Given the presence of successional upland habitat within the area of new soil dispersion, the ecological receptor groups most likely inhabit the property conditions at the time of the August 2024 site visit include:

- Terrestrial plants;
- Terrestrial invertebrates;
- Terrestrial birds (primarily songbirds such as robin, junco, finch, and crow);
- Terrestrial small mammals (primarily voles, shrews, and possibly raccoons, skunk and opossum);
- Limited large mammalian herbivores: black-tailed deer
- Limited avian predators: individual hawks, owls, bald eagles
- Limited mammalian predators: individual coyotes.

With agricultural uses, particularly tillage and row crops, these potential natural inhabitants and users of the subject property likely would decrease.

3.2 SITE LAND AND WATER USE / ALERATIONS

The subject property is currently zoned for Exclusive Farm Use (EFU). Both residential and Farm/light industrial/commercial uses are allowed. This farm property is being prepared by T & K Sester Family, LLC to cultivate rotational crops of grass seed and nursery stock consistent with T & K Sester Family, LLC's other agricultural properties. ODC Development LLC (seller) and T & K Sester Family, LLC (buyer) have provided a letter of project approval agreeing to receive potentially farming impacted soils from the source farm property at the subject farm property. Additionally, receipt of this topsoil is compatible with County land use in this area, as evidenced by an approved Land Use Compatibility Statement. All topsoil received from the source property will be placed within the two Soil Placement Areas identified in Figure 3, neither of which extend into the ephemeral swale/drainage crossing the northwest corner of the subject property. Site land and water use remain unchanged

3.3 SOILS

Surface and shallow subsurface soils data were collected across the subject property and described on Routine Wetland Delineation Data Forms (Appendix A). Upland soils were unilaterally reddish brown silt loam to an average depth of approximately 18 inches bgs. Below 18 inches bgs soils are a clayey silt/silt loam, which slows infiltration, but holds more water, and because of the clay content, is more likely to support the formation of infiltrating interflows (Jackson & Klaus, 2018) and thus contribute more water to the swale than the silty loam topsoils. Given the clayey subsurface soils are 18 or more inches bgs and are very nearly all sloped, very nearly, if not all, water on the subject property remains solely-precipitation based, is not stored, and thus remains ephemeral.

Subject property surface soils were scraped down to the slightly more dense clayey silt and piled for mixing with the incoming farm soil. The incoming soil was examined and is remarkably similar to subject property silt loam surface soil. After soil mixing and amendment, the silty loam surface soils will be thicker, promoting more infiltration and higher subsurface water filtering/quality.

Site soils on the downgradient eastern properties also were remarkably similar to subject property soils and water in these adjacent soils is expected to behave very similarly to the subject property. Received farm soil amendments were not to be made in the swale, in order to not affect water flow from and to adjacent properties.

Most of the subject property was mapped by the USDA NRCS as non-hydric Bornstedt Soils. The swale along the northern property boundary is broadly mapped as hydric Delena soils. Documented soils (Appendix A) were very similar to Bornstedt soils, except within a narrow band along the mid to downgradient swale. These swale soils did not well match the NRCS Delena soils, nor the included Borges soils official descriptions. Further, surface soils within the swale were not hydric during either site visit.

Both the upland Bornstedt and swale surface soils were underlain by similar clayey silt soils. Because the surface soils were all greater than 12 inches deep in all locations and were chroma 2 or greater, no hydric soils were noted across the subject property. The NRCS mapping appears to be incorrect at the subject property and do not seem to authorize any soil protections.

Available evidence suggests there are no "protected" soils at the subject property. Hence the EFU zoning designation. Certainly, erosion of soils into and along the swale during significant precipitation/stormwater events shall be controlled so as not to influence downgradient waters.

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3.4 HYDROLOGY

Hydrology encompasses the entire ever-changing water cycle which is difficult to assess in one short site visit. As a general simple example, water may be first considered as precipitation-based and thus gravitational in nature. Gravitational water, including precipitation infiltrating into soil, forming Nonpoint Source Stormwater (NpSS), or becoming the equivalent underground/subsurface infiltration and associated interflow which predominantly infiltrates through surface soils (Jackson & Klaus, 2018; e.g., underground precipitation and underground stormwater, respectively). In being solely precipitation-based, such gravitational "water" is impermanent and thus, fleeting or "ephemeral" in nature, as well as being continually oxygenated by precipitation such that it cannot become hydric (i.e., anaerobic and electrochemically reducing). Protecting such highly variable ever-changing presence of water could feasibly necessitate the protection of anywhere and anytime precipitation hits the ground, which certainly is unwarranted, if not infeasible. Precipitation-based/gravitational/ephemeral water at or near the soils surface cannot be consistently "Protected" precisely because it has no defining consistency, duration, nor presence, other than being comprised of certain molecules and having recently fallen from the sky.

Precipitation-based/gravitational/ephemeral water may be "Regulated" and thus controlled or manipulated by the property owner in order to protect downgradient protected persons, property, or the environment from Point Source (PSS) and/or Nonpoint Source Stormwater (NpSS). A threshold becomes necessary to differentiate predominantly precipitation-based gravitational water that is to be "regulated/managed" (e.g., NpSS, Point Source Stormwater [PSS] Infiltration, and Interflow) from "protected" Waters and/or Water Bodies. Hence, the Supreme Court of the United States (SCOTUS) has legally determined that such gravitational/ephemeral water becomes "protected" "Waters" (noted by use of the plural) as it forms consistency of form and function and distinguished from gravitational/ephemeral water in becoming "Relatively Permanent Bodies of Water" citing:

"And for the reasons explained below, we conclude that the Rapanos plurality was correct: The Clean Water Acts' (CWA's) use of "waters" encompasses "only those relatively permanent, standing or continuously flowing bodies of water 'forming geographic[al] features' that are described in ordinary parlance as 'streams, oceans, rivers, and lakes." 547 U. S., at 739 (quoting Webster's New International Dictionary 2882 (2d ed. 1954) (Webster's Second); original alterations omitted)" (Sackett v. USEPA, 2013 as cited in Sackett v USEPA, 2023)

So-defined Waters that are "adjacent" to such already defined Regulatory Water Bodies, become similarly jurisdictional only when continuously connected by relatively permanent waters. This reading follows from the CWA's deliberate use of the plural term "waters." See 547 USC, at 732–733, which typically refers to defined "bodies" of water, or "A Water", which by definition are "geologic features" which shall be "Relatively Permanent". Per the Clean Water Act, "Waters" of the U.S., "Waters" of the State, or any "Waters" of a County or City, must actually be "Waters" in order to be protected as such, regardless of isolation or varying jurisdiction. The Functions and Values of these Relatively Permanent Waters are hugely different and lawfully more significant than those of ephemeral Horton Overland Flows and Horton Storage, also known as NpSS, and its underground cousins, Infiltration and Infiltrating Interflow (Jackson and Klaus, 2018).

Relative Permanence specifically infers that any such Waters are not solely precipitation-based, not predominantly moved vertically by gravitational forces, and thus not rapidly dissipating, and thus not ephemeral. Be they Surface or Ground or Underground Waters,

such "protected" Waters, or defined Water Bodies, must exist naturally for long enough during the year to warrant protection of what it is, and not protection of what it is not, what it might be, nor what it may have once been. A condition which is not actually present for adequate duration, cannot be permanently protected as a Defined Water Body, including not as a protected Wetland, a Water, A Surface Water, A Groundwater, or An Underground Water, all of which must actually be Waters in order to be adequately functional as justification for protection. Any "values" not reflective of the functions of these waters become capricious and are to be severed from regulatory considerations.

The threshold between ephemeral (i.e., solely precipitation-based) and relatively permanent is most often referred to as water being present at least "seasonally". But, just as for the term "Wetland", many differing agencies and local jurisdictions consider the concepts of "seasonal" in different ways, thus lacking requisite regulatory consistency required for statutory protections, particularly as these protections are applied to the taking of private property. While generally agreeing there are four seasons in the year, and a season therefore is 3 months of said 12 month year, other requisite seasonal presence considerations are often ignored, such as in being solely precipitation-based there is continued renewal and aeration by precipitation and a rapid predominantly vertical gravitational flow (Jackson & Klaus, 2018). While rarely described in statute or administrative code, Sound Eco found the 2021 King County Washington Surface Water Manual reasonably addressed seasonal through application of best available science and logic, both dictating that if "ephemeral" is associated with the impermanence of rapidly dissipating, infiltrating, and aerating precipitation, then Protected Waters, including Surface Waters, saturated Ground/Underground Waters, and also anoxic/reducing/hydric Wetlands all require a level of seasonal presence, or "base flow", extending beyond the rainy season's replenishment and aeration. Such longer term presence and base flows form when precipitation and resulting ephemeral water or stormwater collects and is stored, such as with snowpack, glacier ice, standing ponds and lakes, Ground Waters (also Groundwaters), and/or any other Waters, all of which shall temporal and structural stability (i.e., longer term pressure) which "stands" up against gravity (i.e., "standing" water). Not so coincidentally, it is this pressure, water pressure, which creates a Water System (or Water Body; see Darcy's Law) and with such pressure flow then becomes predominantly horizontal, in distinct contrast to vertical gravitational flow of ephemeral or solely precipitation-based water. But if Relatively Permanent Waters must be present seasonally, also not be continually renewed by precipitation, then the seasonal nature must extend at least three months beyond the "rainy season", which is usually characterized by, and limited to, periods of increasing or stable surplus of water entering the soil. As the rains decrease, stored water begins to provide base flows, which then must support a presence of confined water (Lake, Pond, Stream, Groundwater, Underground Water, or Wetland) for at least three months after the rain surplus begins to subside, if not after the surplus is exhausted. Thus, Relative Permanency is an existence of a confined or contained water that is present at least three months after a surplus of rain entering the soil begins to decrease, which along the western portions of Oregon and Washington generally is three months after mid to late April, or mid to late July.

Protected "Waters", are relatively permanent "geologic features", existing as physically defined conditions, particularly developing upward pressure, present greater than 3 months after the replenishing surplus of precipitation entering the soils begins to decrease, and thus represent "standing" water with a requisite pressurized surface, standing "up" against dispersion by predominantly vertical gravity driven infiltration and interflow and of enough volume to not rapidly dissipate via evaporation/evapotranspiration. The presence of water that does not represent relative permanency, also does not form Protected "Waters". Such water, including Nonpoint Source Stormwater (NpSS)/runoff is specifically

defined other than defined Waters/Water Bodies, but rather may be unprotected, unregulated, or otherwise regulated conditions (UUORCs), which may create harms to adjacent/downgradient persons, property, or the environment. In being UUORCs, such above ground or underground water may be controlled and or manipulated by property owners (common enemy doctrine) and varying jurisdictions in varying manners, in order to not present the downgradient harms to protected persons, protected property, or the protected environmental conditions.

No protected Waters exist on the subject property. The PSS emanating from the artificially human-created western Farm Pond outfall (onto the subject property, and NPSS resulting from significant precipitation events all shall be controlled in the protection of downgradient waters from flooding, siltation and/or turbidity. This might, but does not necessarily include protecting, enhancing, or restoring natural conditions, particularly as competing beneficial uses also must be addressed, coordinated, and managed.

Metro Title 13 mapping for the subject property shows the swale as a water body and presumably an associated riparian habitat. First, with no channelization and no Relatively Permanent Waters, this Title 13 mapping is plainly not representative of protections due Waters, but rather can only be representative of PSS or NpSS regulation and control, with management of infiltration and interflow so as to reduce downgradient harm. Further, in not having an channel, and thus not being a Water, nor Watercourse of any type, the adjacent habitat is not "riparian", and thus cannot be protected "habitat" as a "buffer" to "a water body". If there is no Water Body, there can be no further protection due to A Water.

There is no known higher than normal groundwater recharge distinguishing this function at the subject property. With Groundwater at a depth of 100 ft bgs, nearby watercourse are not being recharged by groundwater, and so these recharge functions are not particularly differing from any other property and thus are not to be especially protected. Further, proposed property uses and management to various beneficial uses either will not alter existing infiltration and recharge rates, or any increase may appropriately otherwise regulated/managed.

Engineering design for the new farm soil placement/enhancement shall adequately account for the control and maintenance of stormwater functions and values, maintaining natural discharge off site toward groundwater and the Noyer Creek Watershed. This may include various manipulation/enhancement of the swale for retention of stormwater. In fact, placement of the soil enhancements themselves will retain, and possibly detain more water than existing conditions.

3.5 ANTECEDENT PRECIPITATION

The Antecedent Precipitation Tool (APT) version 2.0 (Sprecher and Warne, 2000) was originally developed by the Corps to streamline and automate evaluation of precipitation normalcy and other climatic variables to complete wetland delineations whenever an assessment of the following site-specific conditions is needed: 1) dry season, 2) drought conditions, 3) lower than normal antecedent precipitation, or 4) greater than normal antecedent precipitation is often considered in Waters/Wetlands evaluations, as precipitation might be a water source for RPWs, including Regulatory Wetlands. The APT was applied to evaluate precipitation three months prior to the August site visit and prior to the December 5th and 6th visits. The results are provided in Figures 4 and 5. Precipitation was slightly drier than normal in and prior to August and normal prior to August. The longer term drought index was listed as "mild drought"

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3.6 RELATIVELY PERMANENT WATERS

Assuming Relatively Permanent Waters (RPWs) are present three months (seasonal) after the rainy/wet season, and given that the wet season in the subject property vicinity ends in May, then a water-formed channel containing water constituting RPW would be present in the swale in August. There was no water anywhere in the subject property, including the swale, during the August 13, 2024 site visit, suggesting the subject property swale is not RPW. The DSL might consider the west-adjacent farm pond to be RPW. The nearest RPW is Noyer creek approximately 800 feet north/northeast from the property northeast corner.

No surface water, nor Surface Waters, nor shallow Groundwaters/Underground Waters were located on the subject property during the August 13, 2024 site visit. No RPWs were present.

Heavy rain occurred in the days before the December 5th and 6th site visit. Shortly following these rains, water was noted in the upper-middle section and lower section of the swale. The level of these waters decreased notably over the course of the two day site visit, as it was infiltrating and or draining over and as interflow through, the shallow subsurface soils. No water was noted exiting the surface, nor shallow subsurface (via an eastern off-site drainage ditch) during the site visit.

During peak runoff a few days earlier, turbid water was noted by others, running out of the swale, overland into the adjacent eastern drainage ditch (Figure 6), which flows north to Noyer Creek. No water was flowing in this drainage ditch during either site visit, and water noted in the swale decreased, showing the water is precipitation-based, gravitational, infiltrating water.

Watercourses. At the subject property, there was at the time of the August 13, 2024, site visit, an apparently ephemeral non-channelized low gradient swale that cuts diagonally southwest to northeast across the northwest property portion (Figure 6). The swale has an overall slight one to two percent slope to the northwest, but the outlet and contours of the swale have been blocked and levelled by historical adjacent property agricultural use. It also is likely that slow erosion over time has contributed to filling the swale with topsoil. There was no channelization within the swale at the time of the August site visit. Wet soils are anecdotally indicated by the lack of farming across portions of the swale and associated presence of shrubby vegetation, both evident along the swale in aerial photographs.

Given the effective "dam" across the swale at the adjacent eastern property, water flows are blocked or slowed, and "overflowing" the dam at the northeast end of the swale. During the December 5th and 6th, 2024 site visit, recent heavy precipitation was observed ponding and flowing out of this location, but, without additional rain over the two day site visit span, this water flow stopped and the dammed water level dropped notably. Thus, water at the lowest end of the swale is rapidly infiltrating and/or exiting the area via interflow, and is not a relatively permanent accumulation.

During the December 5th/6th site visit surface water puddling also was noted within the swale at the subject property northwest corner. It is well considered that this water is the collection of overland flow and subsurface interflow that has been temporarily retained by the recent construction of a gravel roadbed across the center of the swale including placement of the drainage culvert (Figure 6) at an elevation above the swale bottom. Thus, similar to the off-site eastern "dam", the new roadbed has become a barrier to NpSS surface flow (Horton overland flow) and subsurface interflow, but these water levels also dropped over the two day site visit, indicating the water is infiltrating and/or flowing under the new roadbed, albeit at a slower rate than normal runoff within the swale. Recent

actions within the then-dry, Nonwaters swale have slowed the flow and interflow resulting from precipitation-based NpSS. The impression of water presence is indicated, but can readily be interpreted to remain precipitation-based, gravitational, oxygenated, water dispersing via infiltration and interflow.

Surface flow in the swale may develop during significant rainfall events and consistent wet season oxygenating rains. This precipitation-based surface flow is toward Noyer Creek to the north/northeast, but also dispersing via infiltration and interflow. Given there was no defined channel within the undisturbed drainage during the August site visit and no ordinary high water mark (OHWM), then the swale itself is not a defined Regulatory Stream/Watercourse, and plainly has a discontinuous, artificially created (out of upland conditions) surface connection to Noyer Creek 1,500 feet to the northeast. There are no Relatively Permanent Surface Waters at the subject property. There can be no protected "riparian" buffer conditions if there are no such RPWs.

Records of nearby wells located on the Oregon Water Resources Department's online Well Report Query indicate depth to regional ground water in the vicinity of the subject site to be greater than 100 feet below ground surface (bgs). No water wells were registered to the subject property during a search of the State of Oregon Water Resources Department (OWRD) online database. Shallow subsurface waters at the subject property are not directly connected to the deeper Groundwater Bodies and thus are unlikely to develop pressurized water systems with a stable Water Table. Rather, water observed in a test pit will be rising with surplus incoming precipitation and dropping/lowering without replenishing precipitation. Shallow subsurface water at the subject property is either precipitation-based infiltration or interflow (which also is continually infiltrating). For the purposes of this report, based on observations of surface waters and subsurface clayey soil contours, it is assumed that shallow subsurface interflow resulting from infiltration, being gravitational in nature and still infiltrating (Jackson & Klaus, 2018), generally mimics topography to the north and northeast along the swale. Subsurface flows near Highway 212 may flow from the subject property to the south.

There is an excavated and dammed farm pond in the swale, immediately west of the subject property northwest corner (Figure 6). This pond has a 12 inch outfall pipe discharging to the subject property. Given the swale is not naturally channelized, this pipe is a point source discharge (of collected precipitation-based PSS and/or NpSS) onto the subject property. This point source discharge is being treated by dispersal onto the subject property, making it an ORC, which per the Common Enemy Doctrine, by law, may be managed, controlled, and preferably dispersed with additional ponding, infiltration, or interflow, prior to appropriate discharge toward the next downgradient property in a natural discharge area in equal or lesser volumes than that entering the property (Currens v Sleek, 1999).

Regulatory Wetlands. Mowing, tilling and/or tractor traffic across the then dry swale disturbed vegetation and some surface soils. Vegetation was fully removed only from portions of the swale, leaving adequate onsite and offsite evidence of a limited area of listed Facultative and Facultative-Wetland vegetation, but no apparent prevalence of Obligate-Wetland plants. Shallow patchy soil disturbances did not disallow adequate soil nor hydrologic assessment. Therefore, while the lack of Obligate-Wetland vegetation suggest the presence of Saturated and Hydric Soil is unlikely, these remaining two Wetland Parameters become primary decision factors regarding the presence/absence of Regulatory Wetlands.

Surface soil across the property is very predominantly a chroma of 3 and 4 (See Routine Wetland Data Forms in Appendix A). Surface soils were not removed from a large majority the swale area, and so could be readily evaluated for Wetland Hydric Soil Indicators.

Within a narrow band of the swale bottom surface soil chroma differs from the rest of the subject property, changing from a chroma of 3 and 4 to a chroma of 2 (see Figure 6), being noticeably darker brown than upgradient surface soil but still without any redoximorphic features. It is likely this change in color is associated with higher organic carbon content resulting from leaf/litter collection and decomposition as a result of reduced or lack of past tillage, associated with the resulting shrubby vegetation, and with higher but still unsaturated water content/collection within the narrow strip, or bottom, of swale. These chroma 2 surface soils were deep enough that the underlying clayey silt subsurface soils could not be interpreted as being indicative of Regulatory Wetland conditions.

Drainage improvements appeared to have been made in proximity to the western Farm Pond PSS outfall (Figure 6), exposing the subsurface clayey silt soil (DP-16) also found across the subject property and swale. However, disturbed surface soils from this area were readily available (DP-18) and well-reflected undisturbed chroma 2 surface soils in the swale. Thus, the drainage improvements also appear to have been conducted within Nonwetland conditions. While the subsurface clayey silt soil may represent relict or current anaerobic and reduced soil conditions, as per the remainder of the swale, these clayey silt soils were not originally within 12 inches of the soil surface, and given there were no Chroma 1 "black" surface soils present, any surface soils examination prior to disturbance would have indicated the presence of Nonhydric and thus Nonwetland soils.

As noted earlier, the entire onsite swale area is directly downgradient of the artificially created/excavated relatively deep western farm pond outfall, which has recently been shown to occasionally discharge significant stormwater flows into the swale, and thus over time, likely has washed top soils from the area of outfall and contributed non-natural higher than normal surface hydrology to the onsite swale area. The PSS surface discharge into the subject property has been appropriately controlled per Oregon Department of Agriculture personnel, with the drainage improvements and now a small earthen dam and outflow containment/dispersion as control of future non-natural PSS discharge and non-natural erosion and contribution to downgradient turbidity. The drainage improvements conducted from the Nonwetland swale conditions were part of these stormwater control improvements.

Sound Eco also notes that the roadbed and poorly elevated drain pipe were placed in an area of clearly Nonwetland conditions. Any more certain decision-making regarding the swale as Wetlands would require notably longer term hydrologic monitoring and/or in-situ measurement, following removal of all non-natural conditions, including the western Farm Pond from the swale. Given the water is considered solely precipitation-based and thus stormwater in nature, placement of an effective diffuser and/or possibly a settling pond at the upper swale reach, or other erosion control measures would seem to result in the reduction of potential harms to downgradient persons, property, or the environment.

Overall, hydrology within the mid and lower swale portions is deemed to not have been notably altered. Given its higher clay content subsurface soil is not being disturbed nor channelized. The volume of interflow that may intersect the swale from upgradient areas has not been altered. With engineering controls for stormwater exiting the newly placed farm soils, hydrology will not be altered due to project actions.

3.7 WETLANDS AS CRITICAL HABITAT

Much debate is made as to whether Wetlands can be protected as Critical Habitats without being Waters, presumably as listed Wetland-Obligate and equivalently adapted Facultative-Wetland or Facultative plants "might" become dominant without Relative Permanency of any water. Statutorily, with respect to the takings of private property, the

simple answer is that wet-lands cannot be regulatorily defined Wetlands without saturated anaerobic and reducing soil conditions AND thus cannot be a Critical Habitat without having the equivalent of a prevalence of Obligate-Wetland plants typically adapted to the saturated and hydric soil conditions.

No prevalence of Obligate-Wetland plants was observed at or surrounding the subject property. No Wetland Critical Habitats exist at the subject property.

Without any RPWs, nor Regulatory Wetlands, there also can be no "Riparian Vegetation", though there may be the same riparian species growing in moist soils anywhere on the planet, including the desert. With no association to RPW, such isolated riparian vegetation merits no authorities whatsoever for protection, particularly considering the fact that is common, grows anywhere there are adequately moist soils, and so is in no need for protection.

This process of "protecting" knowingly unprotected and unregulated conditions is based upon the concepts of the unknown need for climate resiliency. As presented earlier, resiliency is not a regulatory tool authorizing takings of protected species, because it has no specific endpoint. Different species in different locations could become "protected" based upon the whims of unknowing individual values. Agencies (including Counties and Cities) attempting to protect non-RPW associated Wetland and Riparian plants are arbitrary and capricious, and such protections shall be severed from protections at the subject property.

3.8 NON-CRITICAL HABITAT

There is no statutory authority for the protection of non-critical habitat. Thus, generalized habitat mapping such as Metro Title 13 may only be an ORC. Status as an ORC does not justify a taking and it therefore becomes another "optional" tool in the beneficial uses toolbox, but only as selected by the property owners engineer and the property owner as BAT, BMPs, or AKART. Further, if being based upon arbitrary and capricious individual values, again, the concepts of using non-critical habitat as an ORC may be severed from consideration.

The Metro Title 13 high quality habitat mapped across the subject property is likely associated with forested conditions which have not existed since 2005 and likely will never exist again. Given the EFU zoning, and conversion to agricultural farmland, this habitat overlay has no relevance to needed protections nor regulation, other than maybe the maintenance of soil quality and erosion, which are already addressed. This overlay has no statutory authority and should be removed from the subject property.

December 10, 2024

4.0 CONCLUSIONS

The PWB is requiring the property owner to obtain DSL's approval for filling the designated area of the site outside of an already voluntarily established water quality protection buffer surrounding the subject property swale, which approval is not required if no Waters/Wetlands are impacted. Thus, the property owner voluntarily submits this report for a jurisdictional determination regarding the presence/absence of Federal and/or State Waters, including Wetlands. All jurisdictional Waters (plural intentional) must be Relatively Permanent Waters (RPWs), as isolated State Waters/Wetlands must be the same basic "Waters" condition as Federal Waters/Wetlands.

During preparation of the property for approved farm soil amendment, a lower lying swale was partially disturbed. The swale area has been determined herein as being Nonwetlands given a lack of hydric soils and suitable hydrology, and thus no Waters nor Wetlands have been impacted by the permitted farm soil enhancement project. All water in the swale is ephemeral, solely precipitation-based Point Source (PSS) or Nonpoint Source Stormwater (NPSS), which has been adequately controlled by engineering controls and BMPs.

Property owner voluntarily submits this reporting to the DSL for examination of the presence of statutorily jurisdictional Waters, including Wetlands being present on the subject property. The property owner looks to ODA for the determination of whether further stormwater controls are necessary for the protection of downgradient persons, property or the environment.

5.0 LIMITATIONS

This report may be made available to future property owners and to regulatory agencies. This report is not intended for use by others and the information contained herein is not applicable to other sites.

Our interpretation of subsurface conditions is based on field observations and chemical analytical data as necessary. Subsurface conditions were not quantitatively measured during this investigation.

Within the limitations of scope, schedule, and budget, our services have been executed in accordance with generally accepted practices and laws, rules, and regulations at the time that the report was prepared. No other conditions, express or implied, should be understood.

Rone Brewer

Ray A. Brewen

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Paul M. Trone

Principal Geologist, ENW

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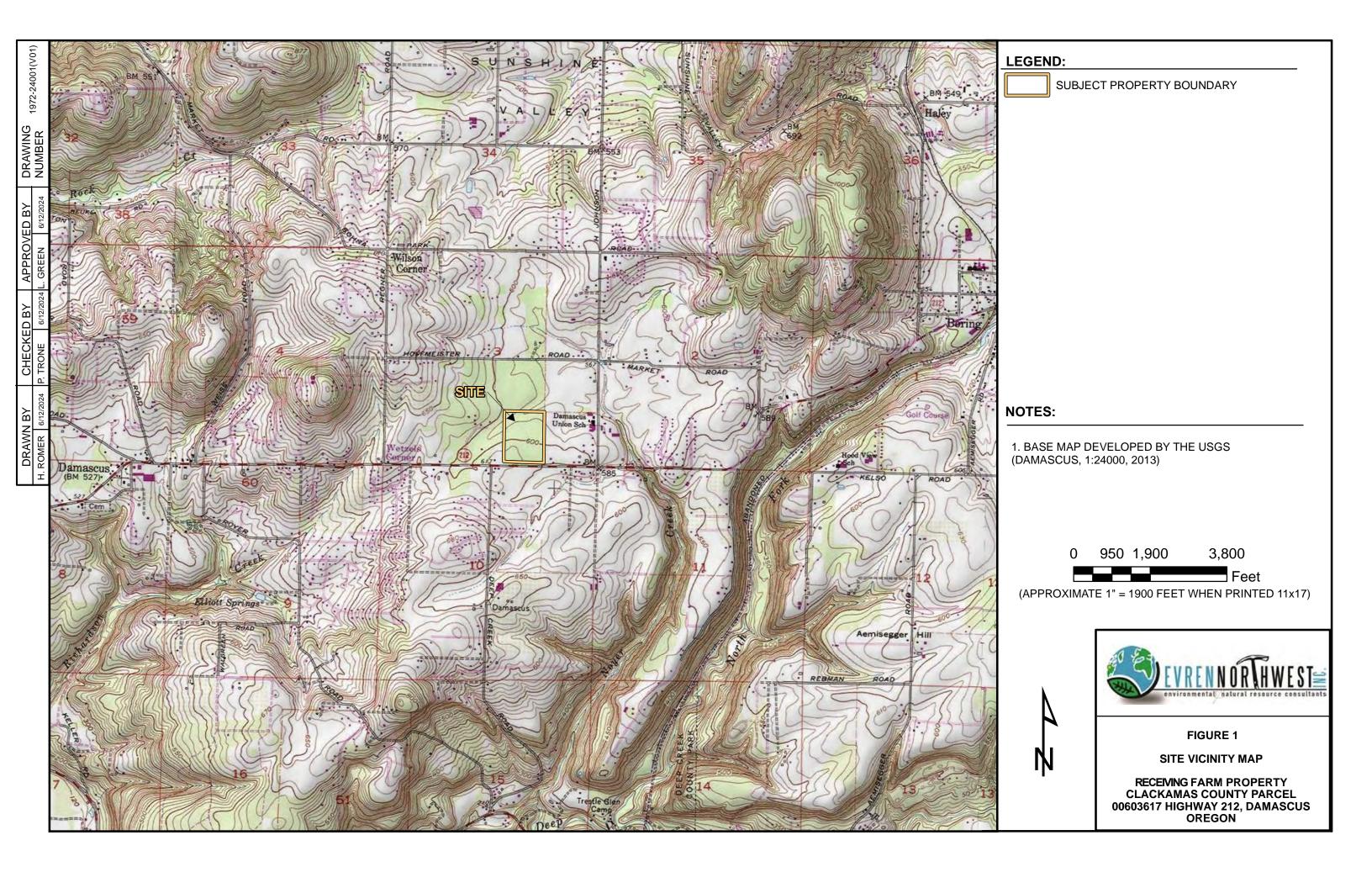
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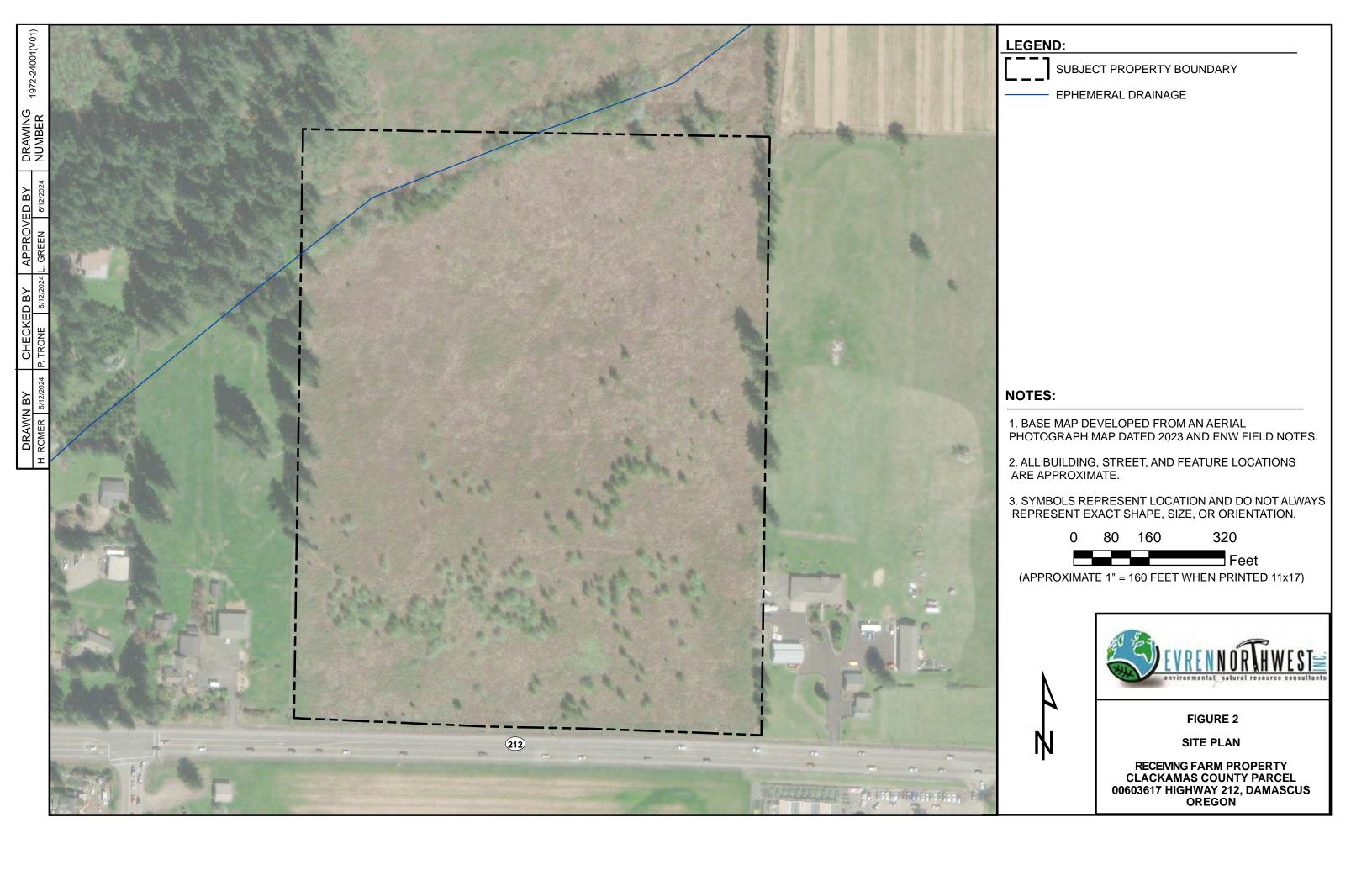
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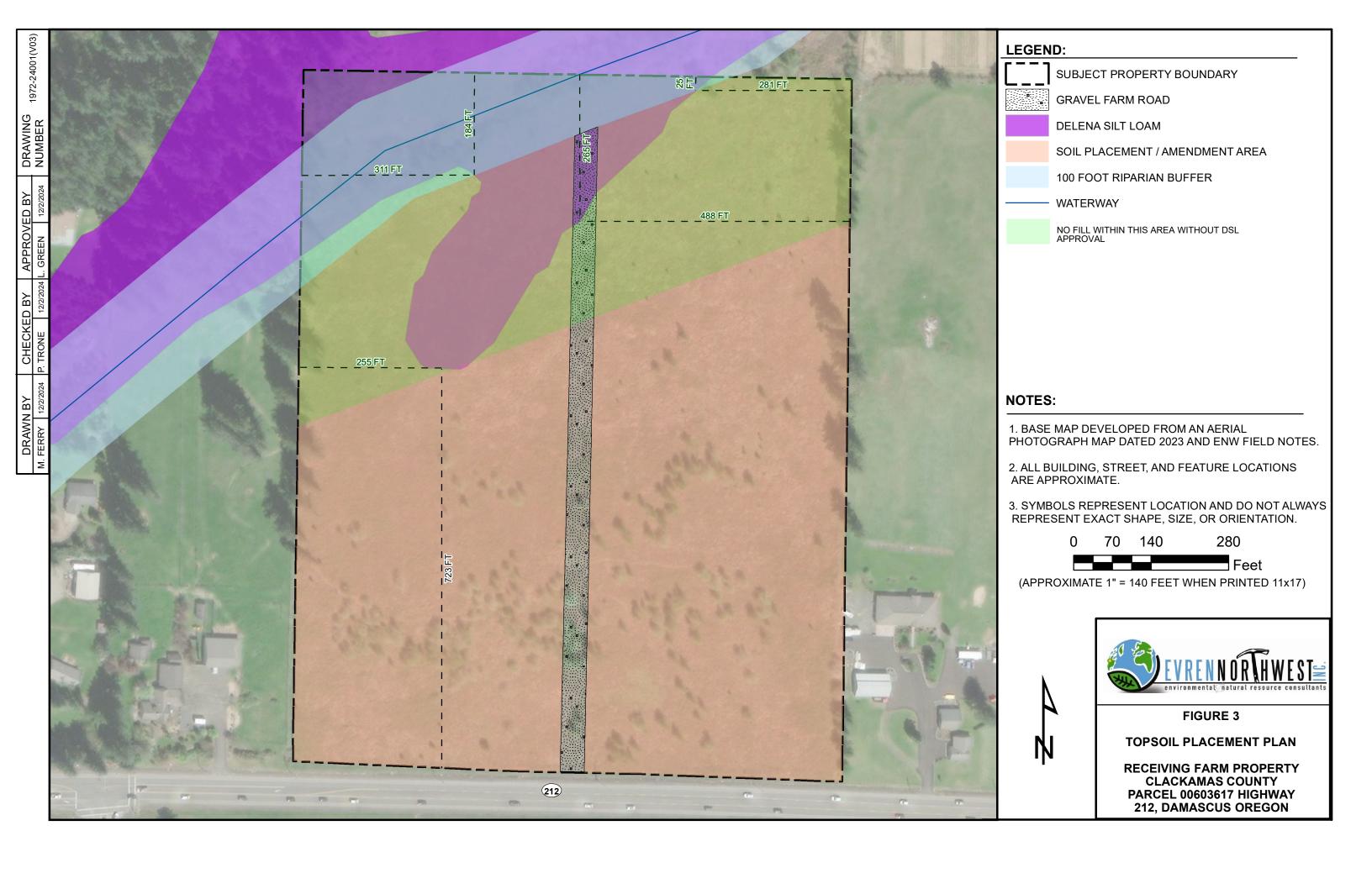
December 10, 2024

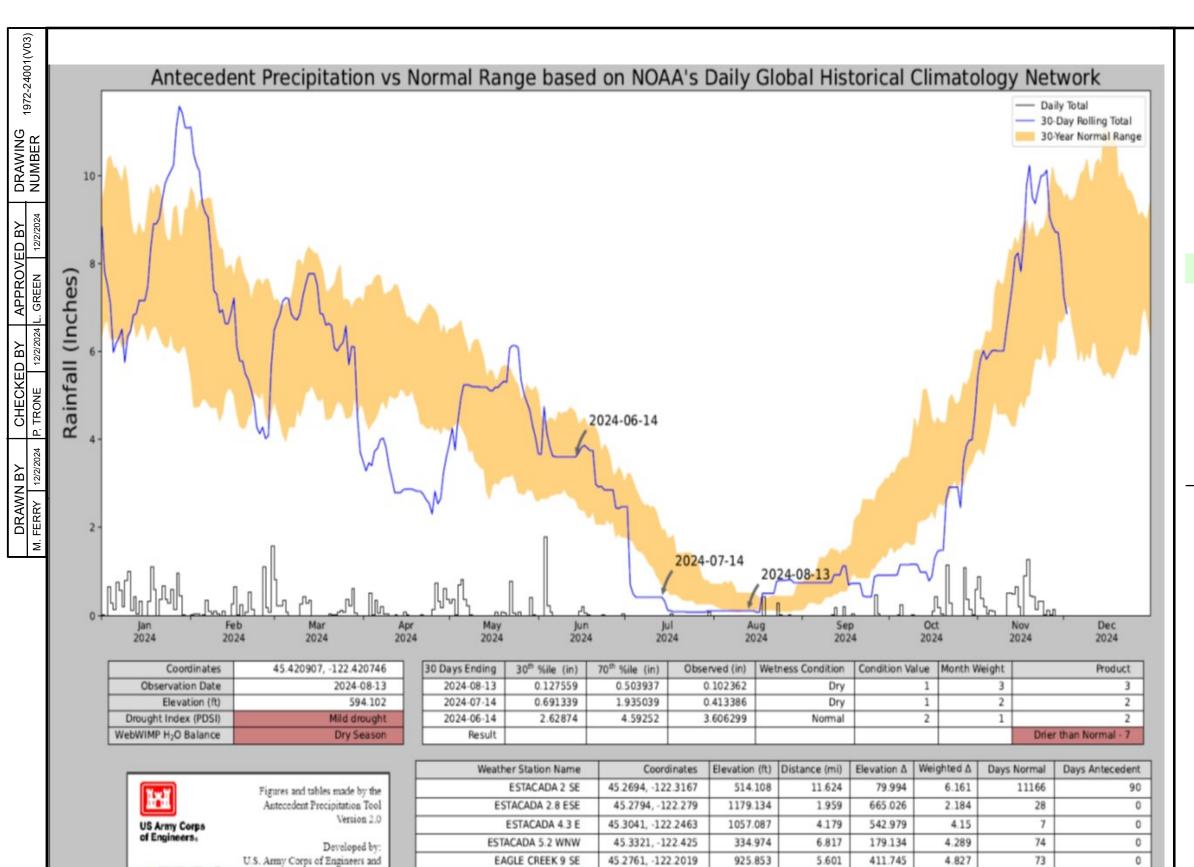
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HEADWORKS PORTLAND WTR B

45.4231, -122.3725

45.4486, -122.1547

532.152

748.032

10.96

14.668

18.044

233.924

5.13

10.032

2

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Development Center

LEGEND

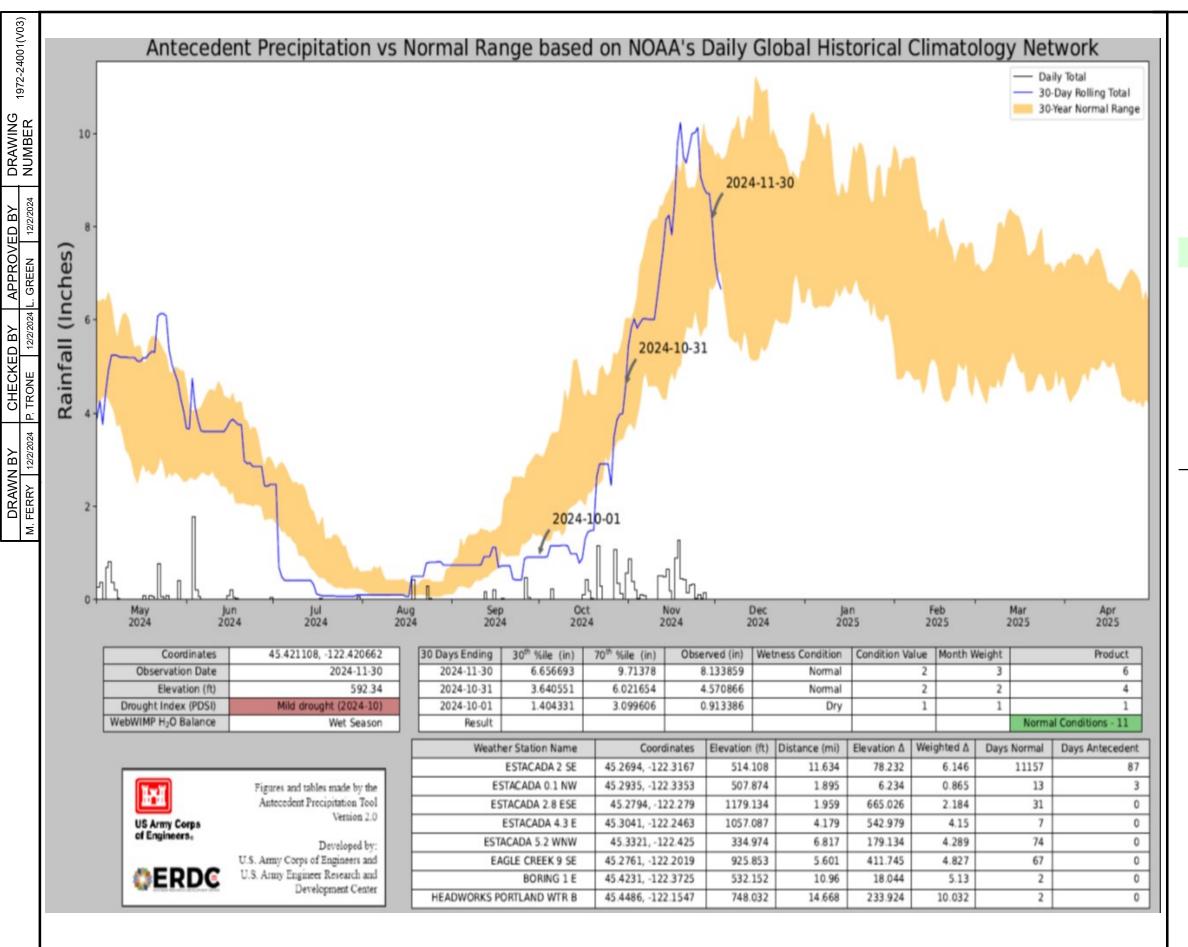
June (Normal),
July (Dry), and
August (Dry)
Precipitation Compared to Norms



FIGURE 4

AUGUST ANTECEDENT PRECIPITATION RESULTS

RCEIVING FARM PROPERTY CLACKAMAS COUNTY PARCEL 00603617 HIGHWAY 212, DAMASCUS OREGON



LEGEND

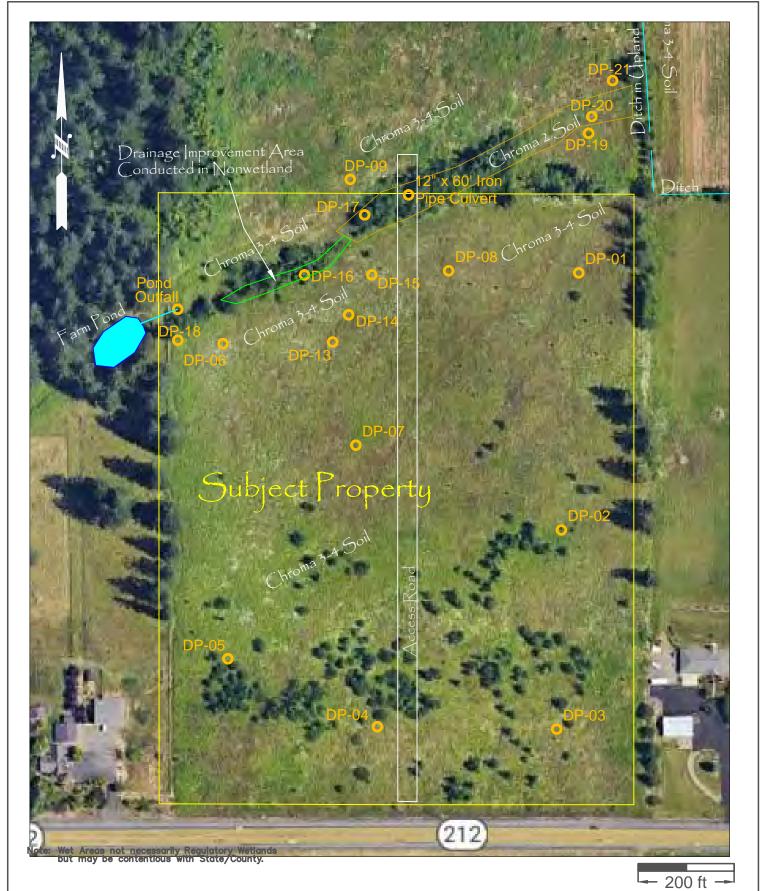
September (Dry), October (Normal), and November (Normal) Precipitation Compared to Norms



FIGURE 5

DECEMBER ANTECEDENT PRECIPITATION RESULTS

RCEIVING FARM PROPERTY CLACKAMAS COUNTY PARCEL 00603617 HIGHWAY 212, DAMASCUS OREGON



<u>Scale:</u>
1 inch = 200 ft

Data Plots and Hydrology Gramor Property

Highway 212; Clackamas County, OR 45.42000°N; -122.42080°E

Sound Ecological Endeavors, LLC; R. Brewer; 05/08/2024; 2347 hrs; V1.0

Figure

6

Appendix A

Corps Routine Wetland Delineation Data Forms

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

Applicant/Owner: Investigator(s): Landform (hillslope, terrace, etc.): Subregion (LRR): A Lat Soil Map Unit Name: Are climatic / hydrologic conditions on the site typical Are Vegetation Are Vegetation	State: WA Sa Section, Township, Range: Local relief (concave, co Long: 45,4210 7 Long: 42 for this time of year? Yes significantly disturbed? naturally problematic? map showing sampling polymatics.	NWI classification: None
VEGETATION Lies scientific names of	planta	
Tree Stratum (Plot size: 30' d.) 1 2 3 4	Absolute Dominant India <u>% Cover Species? Sta</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: (A) (B)
Sapling/Shrub Stratum (Plot size: 20' d.) 1. Sally Scoules and 2. Gut Black (Rubus acmenicant 4. 5. Herb Stratum (Plot size: 10' d.) 1. QA's Lace Davicus calota 2. Golden of Solidago Sp 3. EBlack (Rubus laciniatus)	HO = Total Cover	Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 = FACW species x 2 = FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) (B)
4. Dernon (Anxothenum adorat 5. Mille I (Fretatherum millace) 6. H. B. ach (Rubus discolor) 7. Hawlehit Leontoden Soximlia 8. Soft Rush (Tuncus exercus) 9. 10. 11.	10 N F	4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size:) 1 2 % Bare Ground in Herb Stratum Remarks: Logged filled mawee	= Total Cover	Hydrophytic Vegetation Present? Yes No
Lugger filled wie wee		

Applicant/Owner: Investigator(s): Landform (hillslope, terrace, etc.): Subregion (LRR): Soil Map Unit Name: Are climatic / hydrologic conditions on the site typical Are Vegetation Are Vegetation	for this time of year? Yes No significantly disturbed? Are "No naturally problematic? (nap showing sampling point letters are the sampled Area with	Point: Slope (%): Datum: WGS84 WI classification: (If no, explain in Remarks.) prmal Circumstances" present? Yes No If needed, explain any answers in Remarks.) Docations, transects, important features, etc.
VEGETATION - Use scientific names of	plants.	
<u>Tree Stratum</u> (Plot size: 30' d.) 1. 2. 3. 4.	Absolute Dominant Indicator % Cover Species? Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: (A) (B)
Sapling/Shrub Stratum (Plot size: 20' d.)	= Total Cover	Prevalence Index worksheet:
1. Hazelan	2 N N	Total % Cover of: Multiply by:
2. " Willow (S. Scarlerium)	2 N FAC	OBL species x 1 =
3. H Black (Rubus dixales)	40 Y FAC	FACW species x 2 =
4. E. Black (Rubus laciniated	5 Y FACU	FAC species x 3 =
5	110	FACU species x 4 =
Hash Startum (Distained 401 d.)	= Total Cover	UPL species x 5 =
Herb Stratum (Plot size: 10'd.) 1. Verna (Stape (R. Coloration)	20 Y FACU	Column Totals: (A) (B)
2. C. Thistle (Cityum avense)	3 N FAC	Prevalence Index = B/A =
4. AA Lace O - Corpto	5 FACU	Hydrophytic Vegetation Indicators:
5. T. Black (R. Ursinus)	3 N FACU	1 - Rapid Test for Hydrophytic Vegetation
6. Hawkbit (L. sqxitilis)	15 Y FACY	2 - Dominance Test is >50%
7		3 - Prevalence Index is ≤3.0¹
8 9.		 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
10		5 - Wetland Non-Vascular Plants ¹
11.		Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size:)	56 = Total Cover	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1		
2		Hydrophytic
% Bare Ground in Herb Stratum	= Total Cover	Vegetation Present? Yes No
Remarks:		

Depth	Matrix	to the depti	needed to docur	Redox Fea		Jillilli tile at	sence of mulcators	5.)
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
1-9	7.54R 3/3	7					1	rtomanto
3 10		100	111			- A	5/60	
1-10+	Fg UT	85	11/10	3		m	5160	
			3/2	4		mix	6110	
			U/5	01		MILL	3,100	_
			7/3	27		THICK	5160	-
				-	-			
Type: C=Conc	centration, D=Depl	etion, RM=F	Reduced Matrix, CS	S=Covered of	or Coated Sa	nd Grains.	² Location: PL=Pore	e Lining, M=Matrix.
Hydric Soil Inc	dicators: (Applic	able to all I	LRRs, unless other	erwise note	d.)	Indic	ators for Problema	tic Hydric Soils3:
Histosol (A			Sandy Redox (S		•		cm Muck (A10)	
Histic Epipe			Stripped Matrix				Red Parent Material (TF2)
Black Histic		-	Loamy Mucky N		except MLR	RA 1) - V	ery Shallow Dark Su	urface (TF12)
	Sulfide (A4)		Loamy Gleyed N				ther (Explain in Rem	
	Below Dark Surface	e (A11)	Depleted Matrix					
	Surface (A12)	-	Redox Dark Sur	face (F6)		3	ndicators of hydroph	ytic vegetation and
	cky Mineral (S1)	_	Depleted Dark S			W	etland hydrology mu	ist be present,
Sandy Gley	yed Matrix (S4)	-	_ Redox Depressi	ons (F8)		u	nless disturbed or pr	oblematic
estrictive Layer	r (if present):							
Type:					Hydric So	il Present?	Yes	No X
					Hydric 30	ii rieseiit!	163	NO _
Depth (inches	o Chrome	9						
DROLOGY	Chrome	9						
'DROLOGY	ogy Indicators:		heck all that anniv)			Second	lary Indicators /2 or r	more required)
DROLOGY etland Hydrolo	ogy Indicators:		heck all that apply) Water-Stains		B9) (except		lary Indicators (2 or r	
DROLOGY etland Hydrolo imary Indicators Surface Water	ogy Indicators: (Minimum of one		heck all that apply) Water-Staine MLRA 1, 2, 4	ed Leaves (E		Wa	lary Indicators (2 or r ter-Stained Leaves (and 4B)	
DROLOGY etland Hydrolo imary Indicators Surface Water High Water Ta	egy Indicators: (minimum of one		Water-Staine MLRA 1, 2, 4 Salt Crust (B	ed Leaves (E 4A, and 4B) 311)		Wa	ter-Stained Leaves (B9) (MLRA 1, 2,
DROLOGY etland Hydrolo imary Indicators Surface Water High Water Ta Saturation (A3)	ogy Indicators: s (minimum of one (A1) bble (A2)		Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inve	ed Leaves (E 4A, and 4B) (11) rtebrates (B	13)	Wa 4A, Dra Dry	ter-Stained Leaves (and 4B) inage Patterns (B10) -Season Water Table	B9) (MLRA 1, 2,) e (C2)
DROLOGY etland Hydrolo imary Indicators Surface Water High Water Ta	ogy Indicators: s (minimum of one (A1) bble (A2)		Water-Staine MLRA 1, 2, Salt Crust (B Aquatic Inve Hydrogen St	ed Leaves (E 4A, and 4B) (11) rtebrates (B ulfide Odor (13) C1)	Wa 4A, Dra Dry	ter-Stained Leaves (and 4B) inage Patterns (B10)	B9) (MLRA 1, 2,) e (C2)
DROLOGY etland Hydrolo imary Indicators Surface Water High Water Ta Saturation (A3) Water Marks (I	egy Indicators: s (minimum of one (A1) bble (A2)		Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rhi	ed Leaves (E 4A, and 4B) (11) rtebrates (B ulfide Odor (13) C1)	Wa 4A, Dra Dry Sat	ter-Stained Leaves (and 4B) inage Patterns (B10) -Season Water Table uration Visible on Ae	B9) (MLRA 1, 2,) e (C2) erial Imagery (C9)
DROLOGY etland Hydrolo imary Indicators Surface Water High Water Ta Saturation (A3) Water Marks (I) Sediment Depo	egy Indicators: (minimum of one (A1) (ble (A2)) (B1) osits (B2)		Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rhi Roots (C3)	ed Leaves (B 4A, and 4B) 111) rtebrates (B ulfide Odor (izospheres a	13) C1) along Living	Wa 4A, Dra Dry Sat	ter-Stained Leaves (and 4B) inage Patterns (B10) -Season Water Table uration Visible on Ae omorphic Position (D	B9) (MLRA 1, 2,) e (C2) erial Imagery (C9)
DROLOGY etland Hydrolo imary Indicators Surface Water High Water Ta Saturation (A3) Water Marks (I	egy Indicators: (minimum of one (A1) (ble (A2)) (B1) osits (B2)		Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rhi Roots (C3) Presence of	ed Leaves (B 4A, and 4B) (11) rtebrates (B ulfide Odor ((zospheres a Reduced Iro	13) C1) along Living	Wa 4A, Dra Dry Sat	ter-Stained Leaves (and 4B) inage Patterns (B10) -Season Water Table uration Visible on Ae	B9) (MLRA 1, 2,) e (C2) erial Imagery (C9)
DROLOGY etland Hydrolo imary Indicators Surface Water High Water Ta Saturation (A3) Water Marks (I) Sediment Depo	egy Indicators: s (minimum of one (A1) bble (A2)) B1) osits (B2) (B3)		Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rhi Roots (C3) Presence of Recent Iron Soils (C6)	ed Leaves (B 4A, and 4B) (11) rtebrates (B ulfide Odor (izospheres a Reduced Iro Reduction in	13) C1) along Living on (C4)	Wai 4A, Dra Dry Sati	ter-Stained Leaves (and 4B) inage Patterns (B10) -Season Water Table uration Visible on Ae emorphic Position (D allow Aquitard (D3)	B9) (MLRA 1, 2,) e (C2) erial Imagery (C9)
DROLOGY etland Hydrolo imary Indicators Surface Water High Water Ta Saturation (A3) Water Marks (I Sediment Depo Drift Deposits (Algal Mat or Cr	ogy Indicators: s (minimum of one (A1) ble (A2)) B1) osits (B2) (B3) rust (B4)		Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rhi Roots (C3) Presence of Recent Iron	ed Leaves (B 4A, and 4B) (11) rtebrates (B ulfide Odor (izospheres a Reduced Iro Reduction in	13) C1) along Living on (C4)	Wai 4A, Dra Dry Sati	ter-Stained Leaves (and 4B) inage Patterns (B10) -Season Water Table uration Visible on Ae omorphic Position (D	B9) (MLRA 1, 2,) e (C2) erial Imagery (C9)
DROLOGY etland Hydrolo imary Indicators Surface Water High Water Ta Saturation (A3 Water Marks (I Sediment Depo Drift Deposits (Iron Deposits (ogy Indicators: s (minimum of one (A1) ble (A2)) B1) osits (B2) (B3) rust (B4)		Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rhi Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A)	ed Leaves (B 4A, and 4B) 111) rtebrates (B ulfide Odor (izospheres a Reduced Iro Reduction in	13) C1) along Living on (C4) on Tilled onts (D1)	Wai 4A, Dra Dry Sati	ter-Stained Leaves (and 4B) inage Patterns (B10) -Season Water Table uration Visible on Ae emorphic Position (D allow Aquitard (D3)	B9) (MLRA 1, 2,) e (C2) erial Imagery (C9)
DROLOGY etland Hydrolo imary Indicators Surface Water High Water Ta Saturation (A3) Water Marks (I Sediment Deporift Deposits (Algal Mat or Cr Iron Deposits (Surface Soil Cr	ogy Indicators: s (minimum of one (A1) bble (A2)) B1) osits (B2) (B3) rust (B4)	required; cl	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rhi Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S	ed Leaves (B 4A, and 4B) 111) rtebrates (B ulfide Odor (izospheres a Reduced Iro Reduction in	13) C1) along Living on (C4) on Tilled onts (D1)	Wai 4A,	ter-Stained Leaves (and 4B) inage Patterns (B10) -Season Water Table uration Visible on Ae emorphic Position (D allow Aquitard (D3)	B9) (MLRA 1, 2,) e (C2) erial Imagery (C9) (2)
DROLOGY etland Hydrologimary Indicators Surface Water High Water Ta Saturation (A3) Water Marks (I Sediment Deporift Deposits (Algal Mat or Cr Iron Deposits (Surface Soil Cr Inundation Visi	ogy Indicators: s (minimum of one (A1) bble (A2)) B1) osits (B2) (B3) rust (B4) (B5) racks (B6) ible on Aerial Imag	required; cl	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rhi Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A)	ed Leaves (B 4A, and 4B) 111) rtebrates (B ulfide Odor (izospheres a Reduced Iro Reduction in	13) C1) along Living on (C4) on Tilled onts (D1)	Wai 4A,	ter-Stained Leaves (and 4B) inage Patterns (B10) -Season Water Table uration Visible on Ae comorphic Position (D allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6	B9) (MLRA 1, 2,) e (C2) erial Imagery (C9) (2)
DROLOGY etland Hydrolo imary Indicators Surface Water High Water Ta Saturation (A3) Water Marks (I Sediment Deporift Deposits (Algal Mat or Cr Iron Deposits (Surface Soil Cr Inundation Visi	ogy Indicators: s (minimum of one (A1) bble (A2)) B1) osits (B2) (B3) rust (B4)	required; cl	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rhi Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A)	ed Leaves (B 4A, and 4B) 111) rtebrates (B ulfide Odor (izospheres a Reduced Iro Reduction in	13) C1) along Living on (C4) on Tilled onts (D1)	Wai 4A,	ter-Stained Leaves (and 4B) inage Patterns (B10) -Season Water Table uration Visible on Ae comorphic Position (D allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6	B9) (MLRA 1, 2,) e (C2) erial Imagery (C9) (2)
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TDROLOGY Tetland Hydrologimary Indicators Surface Water High Water Ta Saturation (A3) Water Marks (I Sediment Deporift Deposits (Algal Mat or Cri Iron Deposits (Surface Soil Cri Inundation Visi Sparsely Veger eld Observation	ogy Indicators: s (minimum of one (A1) ble (A2)) B1) osits (B2) (B3) rust (B4) rust (B4) racks (B6) ible on Aerial Imagitated Concave Su	required; cl	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rhi Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A)	ed Leaves (B 4A, and 4B) 111) rtebrates (B ulfide Odor (izospheres a Reduced Iro Reduction in tressed Plar in in Remark	13) C1) along Living on (C4) on Tilled onts (D1)	Wai 4A,	ter-Stained Leaves (and 4B) inage Patterns (B10) -Season Water Table uration Visible on Ae comorphic Position (D allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6	B9) (MLRA 1, 2,) e (C2) erial Imagery (C9) (2)
"DROLOGY Tetland Hydrologimary Indicators Surface Water High Water Ta Saturation (A3) Water Marks (I Sediment Deporift Deposits (Algal Mat or Cr Iron Deposits (Surface Soil Cr Inundation Visi	ogy Indicators: s (minimum of one (A1) ble (A2)) B1) osits (B2) (B3) rust (B4) (B5) racks (B6) ible on Aerial Imagitated Concave Su ins: esent? Yes	required; cl	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rhi Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A) Other (Expla	ed Leaves (B 4A, and 4B) 111) rtebrates (B ulfide Odor (izospheres a Reduced Iro Reduction in tressed Plar in in Remark	13) C1) along Living on (C4) n Tilled onts (D1) ks)	Wai 4A, Dra Dry Sati Geo Sha FAC	ter-Stained Leaves (and 4B) inage Patterns (B10) -Season Water Table uration Visible on Ae morphic Position (D allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6 st-Heave Hummocks	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9) (2) () (LRR A) () (D7)
TDROLOGY Tetland Hydrologimary Indicators Surface Water High Water Ta Saturation (A3) Water Marks (I Sediment Deposits (Surface Soil Colling Sparsely Vege and Observation Uniface Water Presenter Table Presenter Table Presenter Table Presenter Table Presenter Technology (A)	egy Indicators: s (minimum of one (A1) ble (A2)) B1) osits (B2) (B3) rust (B4) B5) racks (B6) ible on Aerial Image tated Concave Su tated Concave Su esent? Yes ent? Yes ent? Yes	gery (B7) uface (B8)	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rhi Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A) Other (Expla	ed Leaves (B 4A, and 4B) 111) rtebrates (B ulfide Odor (izospheres a Reduced Iro Reduction in tressed Plar in in Remark	13) C1) along Living on (C4) n Tilled onts (D1) ks)	Wai 4A, Dra Dry Sati Geo Sha FAC	ter-Stained Leaves (and 4B) inage Patterns (B10) -Season Water Table uration Visible on Ae comorphic Position (D allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9) (2) () (LRR A) () (D7)
DROLOGY etland Hydrologimary Indicators Surface Water High Water Ta Saturation (A3) Water Marks (I Sediment Deporit Deposits (Algal Mat or Critical Iron Deposits (Surface Soil Critical Iron Deposits (Surface Water Presentation Present Iron Iron Present Iron Iron Iron Iron Iron Iron Iron Iron	egy Indicators: s (minimum of one (A1) ble (A2)) B1) osits (B2) (B3) rust (B4) B5) racks (B6) ible on Aerial Image tated Concave Su tated Concave Su esent? Yes ent? Yes ent? Yes ent? Yes ent? Yes	gery (B7) Inface (B8) No No	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rhi Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A) Other (Expla	ed Leaves (B 4A, and 4B) 111) rtebrates (B ulfide Odor (izospheres a Reduced Iro Reduction in tressed Plar in in Remark	13) C1) along Living on (C4) n Tilled onts (D1) ks) Wet	Wai 4A, Dra Dry Sati FAC Rais Fros	ter-Stained Leaves (and 4B) inage Patterns (B10) -Season Water Table uration Visible on Ae omorphic Position (D allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6 st-Heave Hummocks	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9) (2) () (LRR A) () (D7)
DROLOGY etland Hydrolo imary Indicators Surface Water High Water Ta Saturation (A3) Water Marks (I Sediment Depo Drift Deposits (Algal Mat or Cr Iron Deposits (Surface Soil Cr Inundation Visi Sparsely Vege eld Observation reface Water Presenter Table Presenter Table Presented turation Presented Incompany (Incompany) The second of	egy Indicators: s (minimum of one (A1) ble (A2)) B1) osits (B2) (B3) rust (B4) B5) racks (B6) ible on Aerial Image tated Concave Su tated Concave Su esent? Yes ent? Yes ent? Yes ent? Yes ent? Yes	gery (B7) Inface (B8) No No	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rhi Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A) Other (Expla	ed Leaves (B 4A, and 4B) 111) rtebrates (B ulfide Odor (izospheres a Reduced Iro Reduction in tressed Plar in in Remark	13) C1) along Living on (C4) n Tilled onts (D1) ks) Wet	Wai 4A, Dra Dry Sati FAC Rais Fros	ter-Stained Leaves (and 4B) inage Patterns (B10) -Season Water Table uration Visible on Ae omorphic Position (D allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6 st-Heave Hummocks	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9) (2) () (LRR A) () (D7)
DROLOGY etland Hydrolo imary Indicators Surface Water High Water Ta Saturation (A3) Water Marks (I Sediment Depo Drift Deposits (Algal Mat or Cr Iron Deposits (Surface Soil Cr Inundation Visi Sparsely Vege eld Observation rface Water Presenter Table Presenter Table Presented turation Presente	egy Indicators: s (minimum of one (A1) ble (A2)) B1) osits (B2) (B3) rust (B4) B5) racks (B6) ible on Aerial Image tated Concave Su tated Concave Su esent? Yes ent? Yes ent? Yes ent? Yes ent? Yes	gery (B7) Inface (B8) No No	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rhi Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A) Other (Expla	ed Leaves (B 4A, and 4B) 111) rtebrates (B ulfide Odor (izospheres a Reduced Iro Reduction in tressed Plar in in Remark	13) C1) along Living on (C4) n Tilled onts (D1) ks) Wet	Wai 4A, Dra Dry Sati FAC Rais Fros	ter-Stained Leaves (and 4B) inage Patterns (B10) -Season Water Table uration Visible on Ae omorphic Position (D allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6 st-Heave Hummocks	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9) (2) () (LRR A) () (D7)
DROLOGY etland Hydrologimary Indicators Surface Water High Water Ta Saturation (A3) Water Marks (I Sediment Deporit Deposits (Algal Mat or Critical Iron Deposits (Surface Soil Critical Iron Deposits (Surface Water Presentation Present Iron Iron Present Iron Iron Iron Iron Iron Iron Iron Iron	egy Indicators: s (minimum of one (A1) ble (A2)) B1) osits (B2) (B3) rust (B4) B5) racks (B6) ible on Aerial Image tated Concave Su tated Concave Su esent? Yes ent? Yes ent? Yes ent? Yes ent? Yes	gery (B7) Inface (B8) No No	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rhi Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A) Other (Expla	ed Leaves (B 4A, and 4B) 111) rtebrates (B Ilfide Odor (izospheres a Reduced Irc Reduction in tressed Plar in in Remark	13) C1) along Living on (C4) n Tilled onts (D1) ks) Wet	Wai 4A, Dra Dry Sati FAC Rais Fros	ter-Stained Leaves (and 4B) inage Patterns (B10) -Season Water Table uration Visible on Ae omorphic Position (D allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6 st-Heave Hummocks	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9) (2) () (LRR A) () (D7)

Project/Site: Sester/Gramor Ci	ty/County: Chrkamas	Sampling Date: 08/13/2024
	State: WA Sampling I	
	Section, Township, Range: 03	
Landform (hillslope, terrace, etc.):		
	it: 45-41849 Long: -122-41	
Soil Map Unit Name: Bornsled +		VI classification:
Are climatic / hydrologic conditions on the site typica		
Are Vegetation, Soil, or Hydrology		rmal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology		f needed, explain any answers in Remarks.)
Are vegetation , or rivulougy	naturally problematic:	r needed, explain any answers in Nemarks.)
SUMMARY OF FINDINGS - Attach site	map showing sampling point lo	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No		outlier, stationers, important routaires, etc.
Hydric Soil Present? Yes No		n a Wetland? Yes No
Wetland Hydrology Present? Yes No	A .	
Remarks:		
VEGETATION - Use scientific names of	f plants.	
	Technical Section and an artist of the section of	Dominance Test worksheet:
Tree Stratum (Plot size: 30' d.)	Absolute Dominant Indicator % Cover Species? Status	Number of Dominant Species
1. Willows, scouleriana)	3 N FAC	That Are OBL, FACW, or FAC: (A)
2. B. Cottonwood P. Branstifel	a) 3 N FACE	Total Number of Dominant
3.	- Ince	Species Across All Strata: (B)
4 Presented a Dear had		Percent of Dominant Species
and the same of		That Are OBL, FACW, or FAC: (A/B)
	= Total Cover	
Sapling/Shrub Stratum (Plot size: 20' d.)	Total Gover	Prevalence Index worksheet:
1. H Black (R discolor)	55 Y FAC	Total % Cover of: Multiply by:
2. Snowberry 15 albust	F N FACIL	OBL species x 1 =
3.	3 /	
4		
5		FAC species x 3 =
-	= Total Cover	FACU species x 4 =
Herb Stratum (Plot size: 10' d.)	= Total Cover	UPL species x 5 =
1. Verna Grasa	30 Y FACIL	Column Totals: (A) (B)
2 DAICLASS	IN Y EDELL	Prevalence Index = B/A =
3. T Black	3 N FACU	Prevalence index - B/A -
		Hydrophytic Vegetation Indicators:
E		
•		1 - Rapid Test for Hydrophytic Vegetation
		2 - Dominance Test is >50%
7.		3 - Prevalence Index is ≤3.0¹
8.		 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
9.		5 - Wetland Non-Vascular Plants ¹
10.		Problematic Hydrophytic Vegetation¹ (Explain)
11.	43 = Total Cover	
Woody Vine Stratum / Plot size:	= Total Cover	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)		20 problem annous disturbed of problematic.
1		
2	- Total Comma	Hydrophytic
0/ Page Crayed in Harb State	= Total Cover	Vegetation
% Bare Ground in Herb Stratum		Present? Yes No
Remarks: Logged/cleared	1 mayor	
rodde / (160) FG	1. Comme	- 1

Profile Description: (Describe		needed to docu			ntirm the ab	sence of indicators	5.)
Depth Matrix		0-1/1-0	Redox Fea		1 2		
(inches) Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
9-12 7.54R 3/3	3 100	~	-	METERS.	dou.	SILO	Fired Ped
	-						11100
	-		-	-			
	-						
							-
							-
	·						
¹ Type: C=Concentration, D=De	epletion, RM=F	Reduced Matrix, C	S=Covered o	or Coated San	d Grains.	² Location: PL=Pore	E Lining, M=Matrix.
II. I. O. II I. II. II. II. II.		DD		11			
Hydric Soil Indicators: (App	licable to all I	LRRS, unless oth	erwise note	a.)	Indic	ators for Problema	tic Hydric Soils*:
Histosol (A1)	_	_ Sandy Redox (S5)		2	cm Muck (A10)	
Histic Epipedon (A2)		Stripped Matrix	(S6)		R	ed Parent Material (TF2)
Black Histic (A3)		Loamy Mucky I	Mineral (F1) (except MLR	A 1) V	ery Shallow Dark Su	ırface (TF12)
Hydrogen Sulfide (A4)		Loamy Gleyed				ther (Explain in Rem	narks)
Depleted Below Dark Surfa	ace (A11)	Depleted Matri					and the same of th
Thick Dark Surface (A12)		Redox Dark Su			3	ndicators of hydroph	vtic vegetation and
Sandy Mucky Mineral (S1)		Depleted Dark	Surface (F7)		w	etland hydrology mu	ist be present
Sandy Gleyed Matrix (S4)		Redox Depress				nless disturbed or pr	
							7-0-17-17-17-17-17-17-17-17-17-17-17-17-17-
estrictive Layer (if present):							
Type:				Hydric Soil	Present?	Yes	No X
Depth (inches):			-	Try di le con	i i resenti	163	140
Depth (inches).							
marks: In burned	area,	High C	hrom	9			
To burned		High C	hrom	9			
DROLOGY Vetland Hydrology Indicators:		*		9	Sacana	lany Indicators (2 or	more required)
To burned		heck all that apply)			lary Indicators (2 or r	
**DROLOGY Vetland Hydrology Indicators: rimary Indicators (minimum of o		heck all that apply Water-Stair) ned Leaves (E	B9) (except	Wa	ter-Stained Leaves (
POROLOGY Vetland Hydrology Indicators: rimary Indicators (minimum of o		heck all that apply Water-Stair MLRA 1, 2,) ned Leaves (B 4A, and 4B)	B9) (except	Wa 4A,	ter-Stained Leaves (and 4B)	B9) (MLRA 1, 2,
/DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of o Surface Water (A1) High Water Table (A2)		heck all that apply Water-StairMLRA 1, 2,Salt Crust () ned Leaves (B 4A, and 4B) B11)	B9) (except	Wa 4A, Dra	ter-Stained Leaves (and 4B) inage Patterns (B10	B9) (MLRA 1, 2,
TDROLOGY Vetland Hydrology Indicators: rimary Indicators (minimum of o Surface Water (A1) High Water Table (A2) Saturation (A3)		heck all that apply Water-StairMLRA 1, 2,Salt Crust (Aquatic Inv	ned Leaves (B 4A, and 4B) B11) ertebrates (B	B9) (except)	Wa 4A, Dra Dry	ter-Stained Leaves (and 4B) inage Patterns (B10 -Season Water Tabl	B9) (MLRA 1, 2,) e (C2)
DROLOGY Setland Hydrology Indicators: rimary Indicators (minimum of o		heck all that apply Water-Stair MLRA 1, 2, Salt Crust (Aquatic Inv	ned Leaves (B 4A, and 4B) B11) ertebrates (B Sulfide Odor (B9) (except) 13) (C1)	Wa 4A, Dra Dry	ter-Stained Leaves (and 4B) inage Patterns (B10	B9) (MLRA 1, 2,) e (C2)
DROLOGY Setland Hydrology Indicators: rimary Indicators (minimum of o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)		heck all that apply Water-Stair MLRA 1, 2, Salt Crust (Aquatic Inv. Hydrogen S Oxidized R	ned Leaves (B 4A, and 4B) B11) ertebrates (B	B9) (except) 13) (C1)	Wa 4A, Dra Dry Sat	ter-Stained Leaves (and 4B) inage Patterns (B10 -Season Water Tabl uration Visible on Ae	(B9) (MLRA 1, 2, 1) e (C2) erial Imagery (C9)
DROLOGY etland Hydrology Indicators: imary Indicators (minimum of o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)		heck all that apply Water-Stair MLRA 1, 2, Salt Crust (Aquatic Inv. Hydrogen S Oxidized RI Roots (C3)) ned Leaves (B 4A, and 4B) B11) ertebrates (B sulfide Odor (B9) (except) 13) C1) along Living	Wa 4A, Dra Dry Sat	ter-Stained Leaves (and 4B) inage Patterns (B10 -Season Water Tabl uration Visible on Ae omorphic Position (D	(B9) (MLRA 1, 2, 1) e (C2) erial Imagery (C9)
DROLOGY Setland Hydrology Indicators: rimary Indicators (minimum of o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)		heck all that apply Water-Stair MLRA 1, 2, Salt Crust (Aquatic Inv. Hydrogen S Oxidized RI Roots (C3) Presence o	ned Leaves (B 4A, and 4B) B11) ertebrates (B sulfide Odor (hizospheres a	B9) (except) 13) C1) along Living on (C4)	Wa 4A, Dra Dry Sat	ter-Stained Leaves (and 4B) inage Patterns (B10 -Season Water Tabl uration Visible on Ae	(B9) (MLRA 1, 2, 1) e (C2) erial Imagery (C9)
DROLOGY Setland Hydrology Indicators: rimary Indicators (minimum of of of surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)		heck all that apply Water-Stair MLRA 1, 2, Salt Crust (Aquatic Inv Hydrogen S Oxidized Ri Roots (C3) Presence o Recent Iron) ned Leaves (B 4A, and 4B) B11) ertebrates (B sulfide Odor (B9) (except) 13) C1) along Living on (C4)	Wa 4A, Dra Dry Sat Geo	ter-Stained Leaves (and 4B) inage Patterns (B10 -Season Water Tabl uration Visible on Ae omorphic Position (D allow Aquitard (D3)	(B9) (MLRA 1, 2, 1) e (C2) erial Imagery (C9)
DROLOGY Setland Hydrology Indicators: rimary Indicators (minimum of o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)		MLRA 1, 2, MLRA 1, 2, Salt Crust (Aquatic Inv. Hydrogen S Oxidized RI, Roots (C3) Presence o Recent Iron Soils (C6)	ned Leaves (E 4A, and 4B) B11) ertebrates (B Sulfide Odor (hizospheres a f Reduced Iro	B9) (except) 13) (C1) along Living on (C4) n Tilled	Wa 4A, Dra Dry Sat Geo	ter-Stained Leaves (and 4B) inage Patterns (B10 -Season Water Tabl uration Visible on Ae omorphic Position (D	(B9) (MLRA 1, 2, 1) e (C2) erial Imagery (C9)
POROLOGY Tetland Hydrology Indicators: rimary Indicators (minimum of o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)		MLRA 1, 2, Salt Crust (Aquatic Inv. Hydrogen S Oxidized RI Roots (C3) Presence o Recent Iron Soils (C6) Stunted or S	ned Leaves (B 4A, and 4B) B11) ertebrates (B sulfide Odor (hizospheres a	B9) (except) 13) (C1) along Living on (C4) n Tilled	Wa 4A, Dra Dry Sat Geo Sha	ter-Stained Leaves (and 4B) inage Patterns (B10 -Season Water Tabl uration Visible on Ae omorphic Position (D allow Aquitard (D3)	(B9) (MLRA 1, 2, 1) le (C2) erial Imagery (C9) (C2)
POROLOGY Tetland Hydrology Indicators: rimary Indicators (minimum of o 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)		MLRA 1, 2, Salt Crust (Aquatic Inv. Hydrogen S Oxidized RI Roots (C3) Presence o Recent Iron Soils (C6) Stunted or 3 (LRR A)	ned Leaves (B 4A, and 4B) B11) ertebrates (B Sulfide Odor (hizospheres a f Reduced Iro Reduction in	B9) (except) 13) (C1) along Living on (C4) n Tilled ints (D1)	Wa 4A, Dra Dry Sat Geo Sha FAC	ter-Stained Leaves (and 4B) inage Patterns (B10 -Season Water Tabl uration Visible on Ae pmorphic Position (D allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6	(B9) (MLRA 1, 2,) e (C2) erial Imagery (C9) (22)
TDROLOGY Tetland Hydrology Indicators: rimary Indicators (minimum of o 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; cl	MLRA 1, 2, Salt Crust (Aquatic Inv. Hydrogen S Oxidized RI Roots (C3) Presence o Recent Iron Soils (C6) Stunted or 3 (LRR A)	ned Leaves (E 4A, and 4B) B11) ertebrates (B Sulfide Odor (hizospheres a f Reduced Iro	B9) (except) 13) (C1) along Living on (C4) n Tilled ints (D1)	Wa 4A, Dra Dry Sat Geo Sha FAC	ter-Stained Leaves (and 4B) inage Patterns (B10 -Season Water Tabl uration Visible on Ae omorphic Position (D allow Aquitard (D3)	(B9) (MLRA 1, 2,) e (C2) erial Imagery (C9) (22)
TDROLOGY Vetland Hydrology Indicators: rimary Indicators (minimum of o 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 Im	ne required; cl	MLRA 1, 2, Salt Crust (Aquatic Inv. Hydrogen S Oxidized RI Roots (C3) Presence o Recent Iron Soils (C6) Stunted or 3 (LRR A)	ned Leaves (B 4A, and 4B) B11) ertebrates (B Sulfide Odor (hizospheres a f Reduced Iro Reduction in	B9) (except) 13) (C1) along Living on (C4) n Tilled ints (D1)	Wa 4A, Dra Dry Sat Geo Sha FAC	ter-Stained Leaves (and 4B) inage Patterns (B10 -Season Water Tabl uration Visible on Ae pmorphic Position (D allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6	(B9) (MLRA 1, 2,) e (C2) erial Imagery (C9) (22)
POROLOGY Petland Hydrology Indicators: rimary Indicators (minimum of o 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; cl	MLRA 1, 2, Salt Crust (Aquatic Inv. Hydrogen S Oxidized RI Roots (C3) Presence o Recent Iron Soils (C6) Stunted or 3 (LRR A)	ned Leaves (B 4A, and 4B) B11) ertebrates (B Sulfide Odor (hizospheres a f Reduced Iro Reduction in	B9) (except) 13) (C1) along Living on (C4) n Tilled ints (D1)	Wa 4A, Dra Dry Sat Geo Sha FAC	ter-Stained Leaves (and 4B) inage Patterns (B10 -Season Water Tabl uration Visible on Ae pmorphic Position (D allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6	(B9) (MLRA 1, 2,) e (C2) erial Imagery (C9) (22)
/DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of o 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 Im Sparsely Vegetated Concave	ne required; cl	MLRA 1, 2, Salt Crust (Aquatic Inv. Hydrogen S Oxidized RI Roots (C3) Presence o Recent Iron Soils (C6) Stunted or 3 (LRR A)	ned Leaves (B 4A, and 4B) B11) ertebrates (B Sulfide Odor (hizospheres a f Reduced Iro Reduction in	B9) (except) 13) (C1) along Living on (C4) n Tilled ints (D1)	Wa 4A, Dra Dry Sat Geo Sha FAC	ter-Stained Leaves (and 4B) inage Patterns (B10 -Season Water Tabl uration Visible on Ae pmorphic Position (D allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6	(B9) (MLRA 1, 2,) e (C2) erial Imagery (C9) () () (LRR A)
POROLOGY Vetland Hydrology Indicators: rimary Indicators (minimum of o 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 Im Sparsely Vegetated Concave (B1) Red Observations:	ne required; cl nagery (B7) Surface (B8)	MLRA 1, 2, Salt Crust (Aquatic Inv. Hydrogen S Oxidized RI Roots (C3) Presence o Recent Iron Soils (C6) Stunted or s (LRR A) Other (Expl	ned Leaves (B 4A, and 4B) B11) ertebrates (B Sulfide Odor (hizospheres a f Reduced Ird Reduction in Stressed Plar ain in Remark	B9) (except) 13) (C1) along Living on (C4) n Tilled ints (D1)	Wa 4A, Dra Dry Sat Geo Sha FAC	ter-Stained Leaves (and 4B) inage Patterns (B10 -Season Water Tabl uration Visible on Ae pmorphic Position (D allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6	(B9) (MLRA 1, 2,) e (C2) erial Imagery (C9) (C2) (C3) (C3) (C4)
POROLOGY Petland 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 Im Sparsely Vegetated Concave (eld Observations: urface Water Present? Yes	ne required; cl	MLRA 1, 2, Salt Crust (Aquatic Inv. Hydrogen S Oxidized RI Roots (C3) Presence o Recent Iron Soils (C6) Stunted or 3 (LRR A) Other (Expl	ned Leaves (B 4A, and 4B) B11) ertebrates (B Sulfide Odor (hizospheres a f Reduced Iro Reduction in Stressed Plar ain in Remark	B9) (except) 13) (C1) along Living on (C4) n Tilled ints (D1) ks)	Wa 4A, Dra Dry Sat Gec Sha FAC	ter-Stained Leaves (and 4B) inage Patterns (B10 -Season Water Tabl uration Visible on Ae pmorphic Position (D allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6 st-Heave Hummocks	(B9) (MLRA 1, 2, 1) e (C2) erial Imagery (C9) (C2) (C3) (LRR A) (C4) (LRR A)
Portion of the contract of the	ne required; cl	MLRA 1, 2, Salt Crust (Aquatic Inv. Hydrogen S Oxidized RI Roots (C3) Presence o Recent Iron Soils (C6) Stunted or s (LRR A) Other (Expl	ned Leaves (B 4A, and 4B) B11) ertebrates (B Sulfide Odor (hizospheres a f Reduced Iro Reduction in Stressed Plar ain in Remark	B9) (except) 13) (C1) along Living on (C4) n Tilled ints (D1) ks)	Wa 4A, Dra Dry Sat Gec Sha FAC	ter-Stained Leaves (and 4B) inage Patterns (B10 -Season Water Tabl uration Visible on Ae pmorphic Position (D allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6	(B9) (MLRA 1, 2, 1) e (C2) erial Imagery (C9) (C2) (C3) (LRR A) (C4) (LRR A)
Portion of the control of the contro	nagery (B7) Surface (B8)	heck all that apply Water-Stair MLRA 1, 2, Salt Crust (Aquatic Inv Hydrogen S Oxidized RI Roots (C3) Presence o Recent Iron Soils (C6) Stunted or 3 (LRR A) Other (Expl	ned Leaves (B 4A, and 4B) B11) ertebrates (B Sulfide Odor (hizospheres a f Reduced Iro Reduction in Stressed Plar ain in Remark	B9) (except) 13) (C1) along Living on (C4) n Tilled ints (D1) ks)	Wa 4A, Dra Dry Sat Gec Sha FAC	ter-Stained Leaves (and 4B) inage Patterns (B10 -Season Water Tabl uration Visible on Ae omorphic Position (D allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6 st-Heave Hummocks	(B9) (MLRA 1, 2, 1) e (C2) erial Imagery (C9) (C2) (C3) (C4) (C5) (C5) (C6) (C7)
Portion of the control of the contro	nagery (B7) Surface (B8) NoNo	heck all that apply Water-Stair MLRA 1, 2, Salt Crust (Aquatic Inv Hydrogen S Oxidized RI Roots (C3) Presence o Recent Iron Soils (C6) Stunted or 3 (LRR A) Other (Expl	ned Leaves (B 4A, and 4B) B11) ertebrates (B Sulfide Odor (hizospheres a f Reduced Iro Reduction in Stressed Plar ain in Remark	B9) (except) 13) C1) along Living on (C4) n Tilled ints (D1) ks) Wetl	Wa 4A, Dra Dry Sat Geo Sha Raid From	ter-Stained Leaves (and 4B) inage Patterns (B10 -Season Water Tabl uration Visible on Ae omorphic Position (D allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6 st-Heave Hummocks	(B9) (MLRA 1, 2, 1) e (C2) erial Imagery (C9) (C2) (C3) (LRR A) (C4) (LRR A)
Portion of the control of the contro	nagery (B7) Surface (B8) NoNo	heck all that apply Water-Stair MLRA 1, 2, Salt Crust (Aquatic Inv Hydrogen S Oxidized RI Roots (C3) Presence o Recent Iron Soils (C6) Stunted or 3 (LRR A) Other (Expl	ned Leaves (B 4A, and 4B) B11) ertebrates (B Sulfide Odor (hizospheres a f Reduced Iro Reduction in Stressed Plar ain in Remark	B9) (except) 13) C1) along Living on (C4) n Tilled ints (D1) ks) Wetl	Wa 4A, Dra Dry Sat Geo Sha Raid From	ter-Stained Leaves (and 4B) inage Patterns (B10 -Season Water Tabl uration Visible on Ae omorphic Position (D allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6 st-Heave Hummocks	(B9) (MLRA 1, 2, 1) e (C2) erial Imagery (C9) (C2) (C3) (LRR A) (C4) (LRR A)
Portion of the control of the contro	nagery (B7) Surface (B8) NoNo	heck all that apply Water-Stair MLRA 1, 2, Salt Crust (Aquatic Inv Hydrogen S Oxidized RI Roots (C3) Presence o Recent Iron Soils (C6) Stunted or 3 (LRR A) Other (Expl	ned Leaves (B 4A, and 4B) B11) ertebrates (B Sulfide Odor (hizospheres a f Reduced Iro Reduction in Stressed Plar ain in Remark	B9) (except) 13) C1) along Living on (C4) n Tilled ints (D1) ks) Wetl	Wa 4A, Dra Dry Sat Geo Sha Raid From	ter-Stained Leaves (and 4B) inage Patterns (B10 -Season Water Tabl uration Visible on Ae omorphic Position (D allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6 st-Heave Hummocks	(B9) (MLRA 1, 2, 1) e (C2) erial Imagery (C9) (C2) (C3) (LRR A) (C4) (LRR A)
Portion of the control of the contro	nagery (B7) Surface (B8) NoNo	heck all that apply Water-Stair MLRA 1, 2, Salt Crust (Aquatic Inv Hydrogen S Oxidized RI Roots (C3) Presence o Recent Iron Soils (C6) Stunted or 3 (LRR A) Other (Expl	ned Leaves (B 4A, and 4B) B11) ertebrates (B Sulfide Odor (hizospheres a f Reduced Iro Reduction in Stressed Plar ain in Remark	B9) (except) 13) C1) along Living on (C4) n Tilled ints (D1) ks) Wetl	Wa 4A, Dra Dry Sat Geo Sha Raid From	ter-Stained Leaves (and 4B) inage Patterns (B10 -Season Water Tabl uration Visible on Ae omorphic Position (D allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6 st-Heave Hummocks	(B9) (MLRA 1, 2, 1) e (C2) erial Imagery (C9) (C2) (C3) (LRR A) (C4) (LRR A)
POROLOGY Petland Hydrology Indicators: rimary Indicators (minimum of o 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? Yes later Table Present? Yes aturation Present? Includes capillary fringe) Yes	nagery (B7) Surface (B8) NoNo	heck all that apply Water-Stair MLRA 1, 2, Salt Crust (Aquatic Inv Hydrogen S Oxidized RI Roots (C3) Presence o Recent Iron Soils (C6) Stunted or 3 (LRR A) Other (Expl	ned Leaves (B 4A, and 4B) B11) ertebrates (B Sulfide Odor (hizospheres a f Reduced Iro Reduction in Stressed Plar ain in Remark	B9) (except) 13) C1) along Living on (C4) n Tilled ints (D1) ks) Wetl	Wa 4A, Dra Dry Sat Geo Sha Raid From	ter-Stained Leaves (and 4B) inage Patterns (B10 -Season Water Tabl uration Visible on Ae omorphic Position (D allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6 st-Heave Hummocks	(B9) (MLRA 1, 2, 1) e (C2) erial Imagery (C9) (C2) (C3) (LRR A) (C4) (LRR A)

Are Vegetation Soil , or Hydrology Are Vegetation , Soil , or Hydrology	State: WA Sampling Section, Township, Range: Local relief (concave, convex, at: 45. 41850 Long: 122,42 If for this time of year? Yes No significantly disturbed? Are "N naturally problematic? map showing sampling point I is the Sampled Area with	Point: OZS, OZE none): Slope (%): WGS84 WI classification: (If no, explain in Remarks.) ormal Circumstances" present? Yes No (If needed, explain any answers in Remarks.) locations, transects, important features, etc.
V		
Tree Stratum (Plot size: 30'd.) 1. William Park by 2. Bot forward reactly 3. 4.	Absolute Dominant Species? Status Absolute Species? Status FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: (A) (B)
Sapling/Shrub Stratum (Plot size: 20' d.) 1. If Black (R. discolo ()) 2	35 = Total Cover 50 Y FAC	Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 = FACW species x 2 =
Herb Stratum (Plot size: 10'd.) 1. Verna Grada atum 2. Chitle Converse 3. This teles of verse	50 = Total Cover 30 Y FACU 15 Y FACU	FAC species
3. T. Black & Ursinus 4. millet CP. millaceum 5. 6. 7. 8. 9.	3 N FACY	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹
11	53 = Total Cover	Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
% Bare Ground in Herb Stratum	= Total Cover	Hydrophytic Vegetation Present? Yes No
Remarks: No obligate req	MISES Soil/Hyder	ology -> No

Depth	Matrix	to the depth	needed to docum	nent the indi- Redox Featu	cator or co	nfirm the al	bsence of indicators	nt: Sester DI
(inches)	Color (moist)	%	Color (moist)	_ %	Type ¹	Loc ²	Texture	Remarks
3-6	754823/2	98	4/6	62	7	m	5160	
m- A	11 113/2	95	4//	74	2	M	Elle	-
0-17	15 11	do	47.	19	2	M	6.1	-
2 10	11 11 11	70	1/2	the time		11	5110	
12-18	11 11 11	10	4/6	3	.,	M	Sile	
461-			4/3	5	3	m	SILO	
								-
¹Type: C=Con	centration, D=Depl	etion, RM=Re	educed Matrix, CS	=Covered or	Coated San	d Grains.	² Location: PL=Pore	Lining, M=Matrix.
Hydric Soil In	idicators: (Applic	able to all LI	RRs, unless other	wise noted.)	India	cators for Problema	tic Hydric Soils ³ :
Histosol (A			Sandy Redox (St	A STATE OF THE STA			2 cm Muck (A10)	
	pedon (A2)		Stripped Matrix (S6)		F	Red Parent Material (TF2)
Black Hist			Loamy Mucky Mi		xcept MLRA	A 1) \	/ery Shallow Dark Su	rface (TF12)
Hydrogen	Sulfide (A4) Below Dark Surface	a (A11) —	Loamy Gleyed M Depleted Matrix ((Other (Explain in Rem	narks)
Thick Dark	k Surface (A12)	e (A11)	Redox Dark Surfa			3	Indicators of hydroph	utic vocatation and
	cky Mineral (S1)	-	Depleted Dark St	urface (F7)			vetland hydrology mu	
Sandy Gle	eyed Matrix (S4)		Redox Depression	ns (F8)			inless disturbed or pr	
estrictive Laye	or (if present).							
Type:	i (ii present).				Hydric Soil	Drocont?	Vac	No N
					nyunc Son	Present?	Yes	No X
Depth (inches	h chron	nq						
Depth (inches	-	nq						
Depth (inches marks: Hig	h Chran		ack all that apply)			Second	don la diseter (O e e	
Depth (inches marks: Hig	h chron		eck all that apply) Water-Stainer	d Leaves (B9) (except	Second	dary Indicators (2 or n	more required)
Depth (inches marks: High properties of the prop	ogy Indicators:		eck all that apply) Water-Stainer MLRA 1, 2, 4.) (except	Wa	ter-Stained Leaves (I	more required) B9) (MLRA 1, 2,
Depth (inches marks: Hig DROLOGY letland Hydrologimary Indicator Surface Wate High Water Ta	ogy Indicators: s (minimum of one r (A1) able (A2)		Water-Stained MLRA 1, 2, 4, Salt Crust (B1	A, and 4B)		4A Dra	iter-Stained Leaves (I , and 4B) ainage Patterns (B10)	B9) (MLRA 1, 2,
DROLOGY etland Hydrolo imary Indicator Surface Wate High Water To Saturation (A)	ogy Indicators: s (minimum of one or (A1) able (A2)		Water-Stained MLRA 1, 2, 4 Salt Crust (B1 Aquatic Invert	A, and 4B) 1) tebrates (B13	3)	Wa Dra Dry	ater-Stained Leaves (I , and 4B) Ainage Patterns (B10) A-Season Water Table	B9) (MLRA 1, 2, e (C2)
Depth (inches marks: Hig DROLOGY Vetland Hydrologimary Indicator Surface Wate High Water Ta	ogy Indicators: s (minimum of one or (A1) able (A2)		Water-Stained MLRA 1, 2, 4 Salt Crust (B1 Aquatic Invert Hydrogen Sul	A, and 4B) (1) tebrates (B13 fide Odor (C1	3)	Wa Dra Dry	iter-Stained Leaves (I , and 4B) ainage Patterns (B10)	B9) (MLRA 1, 2, e (C2)
Depth (inches marks: H) S DROLOGY Petland Hydrology Ediand Hydrology Surface Wate High Water To Saturation (A:	ogy Indicators: s (minimum of one r (A1) able (A2) 3) (B1)		Water-Stained MLRA 1, 2, 4 Salt Crust (B1 Aquatic Invert	A, and 4B) (1) tebrates (B13 fide Odor (C1	3)	Wa 4A Dra Dry Sat	ster-Stained Leaves (I , and 4B) ainage Patterns (B10) y-Season Water Table turation Visible on Ae	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9)
Depth (inches marks: H/S) DROLOGY Vetland Hydrology Methand Hydrology Surface Wate High Water To Saturation (A) Water Marks	ogy Indicators: s (minimum of one or (A1) able (A2) 3) (B1) cosits (B2)		Water-Stainer MLRA 1, 2, 4. Salt Crust (B1 Aquatic Invert Hydrogen Sul Oxidized Rhiz	A, and 4B) (1) tebrates (B13 fide Odor (C1 tospheres alo	i) 1) ong Living	Wa 4A, Dra Dry Sat	oter-Stained Leaves (I tand 4B) ainage Patterns (B10) A-Season Water Table turation Visible on Ae comorphic Position (Di	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9)
Depth (inches marks: H)G DROLOGY Setland Hydrolomary Indicator Surface Water High Water Tasaturation (AS Water Marks) Sediment Deposits	ogy Indicators: s (minimum of one r (A1) able (A2) 3) (B1) cosits (B2) (B3)		Water-Stainer MLRA 1, 2, 4. Salt Crust (B1 Aquatic Invert Hydrogen Sul Oxidized Rhiz Roots (C3) Presence of Recent Iron R	A, and 4B) 1) rebrates (B13 fide Odor (C1 cospheres ald	i) 1) ing Living (C4)	Wa 4A, Dra Dry Sat	Atter-Stained Leaves (I and 4B) Ainage Patterns (B10) A-Season Water Table Attration Visible on Ae Accommondary (Display)	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9)
Depth (inches marks: H) S DROLOGY Vetland Hydrology rimary Indicator Surface Water High Water Tales Saturation (AS) Water Marks Sediment Dep	ogy Indicators: s (minimum of one r (A1) able (A2) 3) (B1) cosits (B2) (B3)		Water-Stainer MLRA 1, 2, 4. Salt Crust (B1 Aquatic Invert Hydrogen Sul Oxidized Rhiz Roots (C3) Presence of F Recent Iron R Soils (C6)	A, and 4B) (1) (ebrates (B13) (fide Odor (C1) (cospheres ald (Reduced Iron (reduction in T	(C4)	Wa 4A, Dra Dry Sat	oter-Stained Leaves (I tand 4B) ainage Patterns (B10) A-Season Water Table turation Visible on Ae comorphic Position (Di	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9)
Depth (inches marks: High Water Tasaturation (AS Water Marks Sediment Deposits Algal Mat or Commarks)	ogy Indicators: s (minimum of one r (A1) able (A2) 3) (B1) cosits (B2) (B3) Crust (B4)		Water-Stainer MLRA 1, 2, 4. Salt Crust (B1 Aquatic Invert Hydrogen Sul Oxidized Rhiz Roots (C3) Presence of F Recent Iron R Soils (C6) Stunted or Str	A, and 4B) (1) (ebrates (B13) (fide Odor (C1) (cospheres ald (Reduced Iron (reduction in T	(C4)	Wa 4A Dra Dra Sat	Atter-Stained Leaves (I and 4B) Ainage Patterns (B10) A-Season Water Table Attration Visible on Ae Action Position (Diallow Aquitard (D3) C-Neutral Test (D5)	B9) (MLRA 1, 2, e (C2) rial Imagery (C9)
Depth (inches marks: H) G POROLOGY Vetland Hydrologimary Indicator Surface Water High Water To Saturation (AS Water Marks) Sediment Deposits	ogy Indicators: s (minimum of one r (A1) able (A2) 3) (B1) cosits (B2) (B3) Crust (B4) (B5)		Water-Stained MLRA 1, 2, 4. Salt Crust (B1 Aquatic Invert Hydrogen Sul Oxidized Rhiz Roots (C3) Presence of F Recent Iron R Soils (C6) Stunted or Str (LRR A)	A, and 4B) 11) rebrates (B13 fide Odor (C7 cospheres alc Reduced Iron reduction in T	(C4) (C1)	Wa 4A Dra Dry Sat	ter-Stained Leaves (I , and 4B) ainage Patterns (B10) r-Season Water Table turation Visible on Ae omorphic Position (Di allow Aquitard (D3) C-Neutral Test (D5)	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9) 2)
Depth (inches marks: High Water Tasturation (A: Water Marks Sediment Deposits Algal Mat or Clinundation Vision (inches marks)	ogy Indicators: s (minimum of one r (A1) able (A2) 3) (B1) cosits (B2) (B3) Crust (B4) (B5) Cracks (B6) sible on Aerial Image	required; che	Water-Stainer MLRA 1, 2, 4. Salt Crust (B1 Aquatic Invert Hydrogen Sul Oxidized Rhiz Roots (C3) Presence of F Recent Iron R Soils (C6) Stunted or Str	A, and 4B) 11) rebrates (B13 fide Odor (C7 cospheres alc Reduced Iron reduction in T	(C4) (C1)	Wa 4A Dra Dry Sat	Atter-Stained Leaves (I and 4B) Ainage Patterns (B10) A-Season Water Table Attration Visible on Ae Action Position (Diallow Aquitard (D3) C-Neutral Test (D5)	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9) 2)
Depth (inches marks: High Water Tasaturation (A: Water Marks) Sediment Deposits Algal Mat or Color Deposits Surface Soil Color Deposits Surfa	ogy Indicators: s (minimum of one r (A1) able (A2) 3) (B1) cosits (B2) (B3) Crust (B4) (B5) Cracks (B6)	required; che	Water-Stained MLRA 1, 2, 4. Salt Crust (B1 Aquatic Invert Hydrogen Sul Oxidized Rhiz Roots (C3) Presence of F Recent Iron R Soils (C6) Stunted or Str (LRR A)	A, and 4B) 11) rebrates (B13 fide Odor (C7 cospheres alc Reduced Iron reduction in T	(C4) (C1)	Wa 4A Dra Dry Sat	ter-Stained Leaves (I , and 4B) ainage Patterns (B10) r-Season Water Table turation Visible on Ae omorphic Position (Di allow Aquitard (D3) C-Neutral Test (D5)	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9) 2)
Depth (inches marks: H) G POROLOGY Petland Hydrological mary Indicator Surface Water High Water To Saturation (AS Water Marks) Sediment Deposits Algal Mat or Collino Deposits Surface Soil Collino Deposits Surfa	ogy Indicators: s (minimum of one r (A1) able (A2) 3) (B1) cosits (B2) (B3) Crust (B4) (B5) Cracks (B6) sible on Aerial Image	required; che	Water-Stained MLRA 1, 2, 4. Salt Crust (B1 Aquatic Invert Hydrogen Sul Oxidized Rhiz Roots (C3) Presence of F Recent Iron R Soils (C6) Stunted or Str (LRR A)	A, and 4B) 11) rebrates (B13 fide Odor (C7 cospheres alc Reduced Iron reduction in T	(C4) (C1)	Wa 4A Dra Dry Sat	ter-Stained Leaves (I , and 4B) ainage Patterns (B10) r-Season Water Table turation Visible on Ae omorphic Position (Di allow Aquitard (D3) C-Neutral Test (D5)	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9) 2)
Depth (inches marks: H) G POROLOGY Petland Hydrological mary Indicator Surface Water High Water To Saturation (AS Water Marks) Sediment Deposits Algal Mat or Collino Deposits Surface Soil Collino Deposits Surfa	ogy Indicators: s (minimum of one r (A1) able (A2) 3) (B1) cosits (B2) (B3) crust (B4) (B5) Cracks (B6) sible on Aerial Imagetated Concave Su	required; che	Water-Stained MLRA 1, 2, 4. Salt Crust (B1 Aquatic Invert Hydrogen Sul Oxidized Rhiz Roots (C3) Presence of R Recent Iron R Soils (C6) Stunted or Str (LRR A) Other (Explain	A, and 4B) 11) rebrates (B13 fide Odor (C7 cospheres alc Reduced Iron reduction in T	(C4) (C1)	Wa 4A Dra Dry Sat	ter-Stained Leaves (I , and 4B) ainage Patterns (B10) r-Season Water Table turation Visible on Ae omorphic Position (Di allow Aquitard (D3) C-Neutral Test (D5)	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9) 2)
Depth (inches marks: H) G POROLOGY Petland Hydrological mary Indicator Surface Water High Water To Saturation (AS Water Marks) Sediment Deposits Algal Mat or Collino Deposits Surface Soil Collino Deposits Sparsely Vegetary	ogy Indicators: s (minimum of one r (A1) able (A2) 3) (B1) cosits (B2) (B3) crust (B4) (B5) cracks (B6) bible on Aerial Image etated Concave Su cons: esent? Yes	required; che	Water-Stained MLRA 1, 2, 4. Salt Crust (B1 Aquatic Invert Hydrogen Sul Oxidized Rhiz Roots (C3) Presence of R Recent Iron R Soils (C6) Stunted or Str (LRR A) Other (Explain	A, and 4B) 11) rebrates (B13 fide Odor (C7 cospheres alc Reduced Iron reduction in T	(C4) illed (C1)	Wa 4A, Dra A 4A, Dra Sat Sat Sha FA(ter-Stained Leaves (I , and 4B) ainage Patterns (B10) r-Season Water Table turation Visible on Ae omorphic Position (Di allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) st-Heave Hummocks	B9) (MLRA 1, 2, e (C2) rial Imagery (C9) 2) (LRR A) (D7)
Depth (inches marks: H) G POROLOGY Vetland Hydrologimary Indicator Surface Water High Water Tasaturation (A: Water Marks) Sediment Deposits Algal Mat or Collination Vis Sparsely Vege eld Observation of the position o	ogy Indicators: s (minimum of one r (A1) able (A2) 3) (B1) cosits (B2) (B3) crust (B4) (B5) cracks (B6) sible on Aerial Image etated Concave Su cons: esent? Yes ent? Yes	required; che	Water-Stained MLRA 1, 2, 4. Salt Crust (B1 Aquatic Invert Hydrogen Sul Oxidized Rhiz Roots (C3) Presence of F Recent Iron R Soils (C6) Stunted or Str (LRR A) Other (Explain Depth (inches):	A, and 4B) 11) rebrates (B13 fide Odor (C7 cospheres alc Reduced Iron reduction in T	(C4) illed (C1)	Wa 4A, Dra A 4A, Dra Sat Sat Sha FA(ter-Stained Leaves (I , and 4B) ainage Patterns (B10) r-Season Water Table turation Visible on Ae omorphic Position (Di allow Aquitard (D3) C-Neutral Test (D5)	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9) 2)) (LRR A) (D7)
Depth (inches marks: H) G POROLOGY Vetland Hydrologimary Indicator Surface Water High Water Tasturation (A: Water Marks) Sediment Deposits Algal Mat or Collination Vis Sparsely Vege eld Observation (account of the collination of the col	ogy Indicators: s (minimum of one r (A1) able (A2) 3) (B1) cosits (B2) (B3) crust (B4) (B5) cracks (B6) sible on Aerial Image etated Concave Su cons: esent? Yes ent? Yes ent? y fringe) Yes	required; che	Water-Stained MLRA 1, 2, 4. Salt Crust (B1 Aquatic Invert Hydrogen Sul Oxidized Rhiz Roots (C3) Presence of F Recent Iron R Soils (C6) Stunted or Str (LRR A) Other (Explain Depth (inches): Depth (inches):	A, and 4B) 11) rebrates (B13 fide Odor (C7 rospheres ald Reduced Iron reduction in T ressed Plants in Remarks	(C4) (illed (D1) (Wetla	Wa 4A, Dra A 4A, Dra Sat Sat Sha Sha Rai Fro	otter-Stained Leaves (II, and 4B) ainage Patterns (B10) A-Season Water Table turation Visible on Ae comorphic Position (Diallow Aquitard (D3) C-Neutral Test (D5) Sed Ant Mounds (D6) st-Heave Hummocks	B9) (MLRA 1, 2, e (C2) rial Imagery (C9) 2) (LRR A) (D7)
Depth (inches marks: PS Company Indicator Marks	ogy Indicators: s (minimum of one r (A1) able (A2) 3) (B1) cosits (B2) (B3) crust (B4) (B5) cracks (B6) sible on Aerial Image etated Concave Su cons: esent? Yes ent? Yes	required; che	Water-Stained MLRA 1, 2, 4. Salt Crust (B1 Aquatic Invert Hydrogen Sul Oxidized Rhiz Roots (C3) Presence of F Recent Iron R Soils (C6) Stunted or Str (LRR A) Other (Explain Depth (inches): Depth (inches):	A, and 4B) 11) rebrates (B13 fide Odor (C7 rospheres ald Reduced Iron reduction in T ressed Plants in Remarks	(C4) (illed (D1) (Wetla	Wa 4A, Dra A 4A, Dra Sat Sat Sha Sha Rai Fro	otter-Stained Leaves (II, and 4B) ainage Patterns (B10) A-Season Water Table turation Visible on Ae comorphic Position (Diallow Aquitard (D3) C-Neutral Test (D5) Sed Ant Mounds (D6) st-Heave Hummocks	B9) (MLRA 1, 2, e (C2) rial Imagery (C9) 2) (LRR A) (D7)
Depth (inches marks: H) G POROLOGY Vetland Hydrologimary Indicator Surface Water High Water Tasaturation (A: Water Marks) Sediment Deposits Algal Mat or Color Iron Deposits Surface Soil Color Inundation Vis Sparsely Vege eld Observation (arface Water Project Table Present Iron Iron Iron Iron Iron Iron Iron Iron	ogy Indicators: s (minimum of one r (A1) able (A2) 3) (B1) cosits (B2) (B3) crust (B4) (B5) cracks (B6) sible on Aerial Image etated Concave Su cons: esent? Yes ent? Yes ent? y fringe) Yes	required; che	Water-Stained MLRA 1, 2, 4. Salt Crust (B1 Aquatic Invert Hydrogen Sul Oxidized Rhiz Roots (C3) Presence of F Recent Iron R Soils (C6) Stunted or Str (LRR A) Other (Explain Depth (inches): Depth (inches):	A, and 4B) 11) rebrates (B13 fide Odor (C7 rospheres ald Reduced Iron reduction in T ressed Plants in Remarks	(C4) (illed (D1) (Wetla	Wa 4A, Dra A 4A, Dra Sat Sat Sha Sha Rai Fro	otter-Stained Leaves (II, and 4B) ainage Patterns (B10) A-Season Water Table turation Visible on Ae comorphic Position (Diallow Aquitard (D3) C-Neutral Test (D5) Sed Ant Mounds (D6) st-Heave Hummocks	B9) (MLRA 1, 2, e (C2) rial Imagery (C9) 2) (LRR A) (D7)

1 - 411	a band	00/18/2021
Project/Site: Sester/Gramor City	/County: Clackanias	Sampling Date: 09/13/2024
Applicant/Owner: Seshor Farms	State: WA Sampling	
	Section, Township, Range: 03,00	
	Local relief (concave, convex, n	
	: 45.41086 Long: -122.42	
Soil Map Unit Name: Some Text		WI classification:
Are climatic / hydrologic conditions on the site typical		(If no, explain in Remarks.)
Are Vegetation Soil , or Hydrology Are Vegetation , Soil , or Hydrology		ormal Circumstances" present? Yes No If needed, explain any answers in Remarks.)
Are Vegetation , Soil , or Hydrology	Hattifally problematic?	in needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site n	nap showing sampling point l	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No		
Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No		in a Wetland? Yes NoX
Remarks:		
VEGETATION – Use scientific names of	plants.	
	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30' d.)	% Cover Species? Status	Number of Dominant Species
1. Willow (SI SCOULDING)	TO Y FAC	That Are OBL, FACW, or FAC: (A)
2. BEOTTONWOOD P. horsamille	120 Y FAC	Total Number of Dominant
3.		Species Across All Strata: (B)
4.	VE 7	Percent of Dominant Species That Are OBL, FACW, or FAC: 57 (A/B)
		That Are OBL, FACVV, of FAC (A/B)
	= Total Cover	
Sapling/Shrub Stratum (Plot size: 20' d.)	61. 10	Prevalence Index worksheet:
1. H. Bhek (B discolor)	40 Y FAC	Total % Cover of: Multiply by:
2 EBlack & lacitalistus	10 Y FAU	OBL species x 1 =
3.	*	FACW species x 2 =
4.		FAC species x 3 =
5		FACU species x 4 =
	= Total Cover	UPL species x 5 =
Herb Stratum (Plot size: 10'd.)	on V Chair	Column Totals: (A) (B)
1. and (et (P. millaceum)	10 Y YACU	
2. Velvetor	O Y SAC	Prevalence Index = B/A =
3. Groldentod (Sol. SP)	3 N FACY	The description of the second
4. Vernal (A. odaratum	12 N FACU	Hydrophytic Vegetation Indicators:
5. Deviey SocaelC. dewegard 6. T. Black (R. UTSINUS)	The house	1 - Rapid Test for Hydrophytic Vegetation
	LO I WHILE	2 - Dominance Test is >50%
7		3 - Prevalence Index is ≤3.0¹
		4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
9.		5 - Wetland Non-Vascular Plants ¹
10.		Problematic Hydrophytic Vegetation¹ (Explain)
11.	4 + = Total Cover	
Woody Vine Stratum (Plot size:		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1		and the second of problems.
2.		
	= Total Cover	Hydrophytic
% Bare Ground in Herb Stratum		Vegetation Present? Yes No X
		100
Remarks: At 11		No.
Remarks: No obligates = Requ	ires soil + holder	No No
_	- Marie Eg	7 -2 .100

Color (moist) Source Color (moist) Source Color Co	Profile Description: (Describe Depth Matrix			Redox Fe		uie al	control of malcators	J.,
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. **Location: PL=Pore Lining, M=Matrix Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Sandy Redox (S5) Histo Epipedon (A2) Stripped Matrix (S6) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Uper (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Depleted Matrix (F3) Thick Dark Surface (A12) Sandy Mucky Mineral (F1) Present (F6) **Indicators of hydrophytic vegetation and velland hydrology must be present, welland hydrology must be present, unless disturbed or problematic asstructive Layer (If present): Type: Depth (inches): Water Sandy Mucky Mineral (F1) Sand Mucky Mu		%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histosol (A3) Histosol (A4) High Varinger Sulfide (A4) High Varinger Sulfide (A4) Loarny Gieyed Matrix (F2) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (F7) Sandy Mukey Mineral (G1) Sandy Mukey Mineral (G1) Sandy Mukey Mineral (G1) Bandy Mukey	5-15 7.5 YR3/s	100	-	tous		tes	Silo	-
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histosol (A3) Sandy Redox (S5) Black Histic (A3) Loamy Gleyed Matrix (S6) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Sandy Muck (A12) Hydrogen Sulfide (A3) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A12) Sandy Muck (A12) Redox Dark Surface (F6) Sandy Muck (A12) Popleted Matrix (F2) Depleted Below Dark Surface (F7) Redox Dark Surface (F7) Redox Depressions (F8) Brinciators of hydrophytic vegetation an wetland hydrology must be present, unless disturbed or problematic unless di								-
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histo Epipedon (A2) Black Histic (A3) Loamy Bucky Mineral (F1) (except MLRA 1) Histosol (A1) Histosol (A1) Black Histic (A3) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Sandy Redox (B5) Pepleted Below Dark Surface (A12) Sandy Mukey Mineral (F1) (except MLRA 1) Depleted Below Dark Surface (A12) Sandy Mukey Mineral (S1) Sandy Below Dark Surface (A12) Redox Dark Surface (F6) Sandy Mukey Mineral (S1) Sandy Below Dark Surface (F7) Redox Dark Surface (F7) Redox Depressions (F8) Problematic Hydro Soil Present? Thick Dark Surface (A12) Sandy Mukey Mineral (S1) Sandy Mukey Mineral (S1) Sandy Below Dark Surface (F7) Redox Depressions (F8) Phydric Soil Present? Water-Stained Leaves (B9) (except MLRA 1) Hydric Soil Present? Water-Stained Leaves (B9) (except MLRA 1) Water Table (A2) Sand Trust (B11) Sand Crust (B1) Sat Crust (B1) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation (A3) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Solid Coff (C1) Solid Coff (C2) Saturation (Visible on Aerial Imagery (C9) Solid Coff (C3) Algal Mat or Crust (B4) Surface Soil Cracks (B6) Iron Deposits (B5) Surface Water Present? Yes No Depth (inches): Hydric Soil Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histo Epipedon (A2) Black Histic (A3) Loamy Bucky Mineral (F1) (except MLRA 1) Histosol (A1) Histosol (A1) Black Histic (A3) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Sandy Redox (B5) Pepleted Below Dark Surface (A12) Sandy Mukey Mineral (F1) (except MLRA 1) Depleted Below Dark Surface (A12) Sandy Mukey Mineral (S1) Sandy Below Dark Surface (A12) Redox Dark Surface (F6) Sandy Mukey Mineral (S1) Sandy Below Dark Surface (F7) Redox Dark Surface (F7) Redox Depressions (F8) Problematic Hydro Soil Present? Thick Dark Surface (A12) Sandy Mukey Mineral (S1) Sandy Mukey Mineral (S1) Sandy Below Dark Surface (F7) Redox Depressions (F8) Phydric Soil Present? Water-Stained Leaves (B9) (except MLRA 1) Hydric Soil Present? Water-Stained Leaves (B9) (except MLRA 1) Water Table (A2) Sand Trust (B11) Sand Crust (B1) Sat Crust (B1) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation (A3) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Solid Coff (C1) Solid Coff (C2) Saturation (Visible on Aerial Imagery (C9) Solid Coff (C3) Algal Mat or Crust (B4) Surface Soil Cracks (B6) Iron Deposits (B5) Surface Water Present? Yes No Depth (inches): Hydric Soil Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histosol (A3) Sandy Redox (S5) Black Histic (A3) Loamy Gleyed Matrix (S6) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Sandy Muck (A12) Hydrogen Sulfide (A3) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A12) Sandy Muck (A12) Redox Dark Surface (F6) Sandy Muck (A12) Popleted Matrix (F2) Depleted Below Dark Surface (F7) Redox Dark Surface (F7) Redox Depressions (F8) Brinciators of hydrophytic vegetation an wetland hydrology must be present, unless disturbed or problematic unless di				_	_	-		
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosel (A1) Histosel (A2) Histosel (A3) Sandy Redox (S5) Black Histic (A3) Loamy Gleyed Matrix (S6) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (F1) (except MLRA 1) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) Secondary Indicators (2 or more required) Water-Stained Leaves (S9) (except Mucky Mineral (F1) Water-Stained Leaves (S9) (except Mucky Mineral (S1) Water Marks (B1) Drainage Patterns (B10) Dry-Season Water Table (A2) Sandy Mucky Mineral (S1) Secondary Indicators (2 or more required) Water-Stained Leaves (S9) (except Walandy Mucky Mineral (S1) Water Marks (B1) Drainage Patterns (B10) Dry-Season Water Table (A2) Sandy Mucky Mineral (S1) Secondary Indicators (2 or more required) Water-Stained Leaves (S9) (except Walandy Mucky Mineral (S1) Secondary Indicators (2 or more required)								
Histosol (A1) Histic Epipedon (A2) Histic Epipedon (A2) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Loamy Mukey Mineral (F1) (except MLRA 1) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Redox Dark Surface (F5) Sandy Mukey Mineral (S1) Sandy Mukey Mineral (S1) Sandy Mukey Mineral (S1) Depleted Mark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8) BROLOGY ettand Hydrology Indicators: Imary Indicators (minimum of one required; check all that apply) DROLOGY ettand Hydrology Indicators: Imary Indicators (minimum of one required; check all that apply) Mater Table (A2) Salt Crust (B11) Saturation (A3) Water Marks (B1) Saturation (A3) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rinzospheres along Living Redox Dark (B4) Solt (C6) Recombround (C4) Recent Iron Reduction in Tilled Solts (C6) Solts (C6) Surface Soil Cracks (B6) Iron Deposits (B5) Surface Soil Cracks (B6) Iron Deposits (B7) Sparsely Vegetated Concave Surface (B8) Presence of Reduced Iron (C4) Recent Iron Reduction in Remarks) Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Irace Water Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Iron Deposits Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Type: C=Concentration, D=De	pletion, RM=Red	duced Matrix, C	S=Covered	or Coated Sar	nd Grains.	² Location: PL=Por	e Lining, M=Matrix.
Histic Epipedon (A2) Black Histic (A3) Loarny Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (F12) Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Dark Surface (F6) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Redox Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Redox Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Redox Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Pype: Depth (inches): Inarks: Hydric Soil Present? Yes No Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Hydrology Indicators: Imary Indicators (minimum of one required): Matrix (B1) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Hydrology Indicators (Present): Matrix (B1) Water Table (A2) Salt (B1) S	Hydric Soil Indicators: (Appl	icable to all LR	Rs, unless oth	erwise note	ed.)	India	ators for Problema	tic Hydric Soils ³ :
Black Histic (A3)							A STATE OF THE PARTY OF THE PAR	
Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (F3) Pepleted Dark Surface (F7) Redox Dark Surface (F7) Redox Depressions (F8) Bastrictive Layer (if present): Type: Deplit (inches): Imary Indicators (minimum of one required; check all that apply) Water-Stained Leaves (B9) (except Matrix (F2) MLRA 1, 2, 4A, and 4B) High Water Table (A2) Saturation (A3) Saturation (A3) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Sediment Deposits (B2) Drift Deposits (B3) Presence of Reduced fron (C4) Recent fron Reduction in Tilled Solis (C6) Surface Soli Cracks (B6) Iron Deposits (B5) Iron Deposits (B5) Curface Soli Cracks (B6) Iron Deposits (B5) Curface Soli Cracks (B6) Iron Deposits (B8) Other (Explain in Remarks) Wetland Hydrology Present? Yes No Depth (inches):	Histic Epipedon (A2)							
Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Redox Depressions (F8) strictive Layer (if present): Type: Depth (inches): Inarks: Hydric Soil Present? Yes No Depth (inches): DROLOGY ettand Hydrology Indicators: Imary Indicators (minimum of one required; check all that apply) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Algal Mat or Crust (B4) Surface Soil Cracks (B6) Inno Deposits (B5) Surface Soil Cracks (B6) Inno Deposits (B5) Inno Deposits (B5) Surface Concave Surface (B8) Inno Deposits (B5) Surface Other (Explain in Remarks) Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Y					(except MLR			
Thick Dark Surface (A12)		ce (A11)				_ (uner (Explain in Ren	narks)
Sandy Mucky Mineral (S1)						3	Indicators of hydronic	vtic vegetation and
Sandy Gleyed Matrix (S4))			
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scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	POROLOGY Tetland Hydrology Indicators: rimary Indicators (minimum of on 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 Ima Sparsely Vegetated Concave Seld Observations: urface Water Present? Yes	ne required; chec	Water-Stain MLRA 1, 2, Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A) Other (Explain	ded Leaves (4A, and 4B B11) ertebrates (E sulfide Odor nizospheres f Reduced Ir Reduction i Stressed Pla ain in Remain	al 3) (C1) along Living on (C4) n Tilled ants (D1) rks)	Wa 4A, Dra Dry Sal Ge Sha FA	ter-Stained Leaves (, and 4B) iinage Patterns (B10 -Season Water Table uration Visible on Accommorphic Position (Dallow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6 st-Heave Hummocks	(B9) (MLRA 1, 2,) e (C2) erial Imagery (C9) (22) (3) (LRR A) (5) (LRR A)
	POROLOGY Vetland Hydrology Indicators: rimary Indicators (minimum of on 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 Ima Sparsely Vegetated Concave Seld Observations: urface Water Present? Ves	ne required; chec	Water-Stain MLRA 1, 2, Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A) Other (Explain	ded Leaves (4A, and 4B B11) ertebrates (E sulfide Odor nizospheres f Reduced Ir Reduction i Stressed Pla ain in Remain	al 3) (C1) along Living on (C4) n Tilled ants (D1) rks)	Wa 4A, Dra Dry Sal Ge Sha FA	ter-Stained Leaves (, and 4B) iinage Patterns (B10 -Season Water Table uration Visible on Accommorphic Position (Dallow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6 st-Heave Hummocks	(B9) (MLRA 1, 2,) e (C2) erial Imagery (C9) (22) (3) (LRR A) (5) (LRR A)
narks:	TOROLOGY Tetland Hydrology Indicators: rimary Indicators (minimum of on 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 Ima Sparsely Vegetated Concave Seld Observations: urface Water Present? For Saturation Present? Setter Table Present? Setter Table Present? Setter Saturation Present Pr	agery (B7) Surface (B8)	Water-Stain MLRA 1, 2, Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A) Other (Explain Depth (inches) Depth (inches)	ded Leaves (4A, and 4B B11) ertebrates (E sulfide Odor nizospheres f Reduced Ir Reduction i Stressed Pla ain in Remai	al 3) (C1) along Living ron (C4) in Tilled ints (D1) rks) Wetl	Wa 4A, Dra Pro Satistic State Share FAG	ter-Stained Leaves (, and 4B) inage Patterns (B10 -Season Water Table uration Visible on Ae omorphic Position (D allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6 st-Heave Hummocks	(B9) (MLRA 1, 2,) e (C2) erial Imagery (C9) (22) (3) (LRR A) (5) (LRR A)
narks:	Etland Hydrology Indicators: imary Indicators (minimum of on 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 Ima Sparsely Vegetated Concave S eld Observations: urface Water Present? ater Table Present? interest Yes ater Table Present? includes capillary fringe) Yes	agery (B7) Surface (B8)	Water-Stain MLRA 1, 2, Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A) Other (Explain Depth (inches) Depth (inches)	ded Leaves (4A, and 4B B11) ertebrates (E sulfide Odor nizospheres f Reduced Ir Reduction i Stressed Pla ain in Remai	al 3) (C1) along Living ron (C4) in Tilled ints (D1) rks) Wetl	Wa 4A, Dra Pro Satistic State Share FAG	ter-Stained Leaves (, and 4B) inage Patterns (B10 -Season Water Table uration Visible on Ae omorphic Position (D allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6 st-Heave Hummocks	(B9) (MLRA 1, 2,) e (C2) erial Imagery (C9) (22) (3) (LRR A) (5) (LRR A)
	Eld Observations: Inface 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 Ima Sparsely Vegetated Concave Seld Observations: Inface Water Present? I	agery (B7) Surface (B8)	Water-Stain MLRA 1, 2, Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A) Other (Explain Depth (inches) Depth (inches)	ded Leaves (4A, and 4B B11) ertebrates (E sulfide Odor nizospheres f Reduced Ir Reduction i Stressed Pla ain in Remai	al 3) (C1) along Living ron (C4) in Tilled ints (D1) rks) Wetl	Wa 4A, Dra Pro Satistic State Share FAG	ter-Stained Leaves (, and 4B) inage Patterns (B10 -Season Water Table uration Visible on Ae omorphic Position (D allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6 st-Heave Hummocks	(B9) (MLRA 1, 2,) e (C2) erial Imagery (C9) (22) (3) (LRR A) (5) (LRR A)
	etland Hydrology Indicators: imary Indicators (minimum of on 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 Image Sparsely Vegetated Concave Seld Observations: urface Water Present? Yes ater Table Present? Yes ater Table Present? Yes aturation Present? Includes capillary fringe) Yes orcibe Recorded Data (stream gas	agery (B7) Surface (B8)	Water-Stain MLRA 1, 2, Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A) Other (Explain Depth (inches) Depth (inches)	ded Leaves (4A, and 4B B11) ertebrates (E sulfide Odor nizospheres f Reduced Ir Reduction i Stressed Pla ain in Remai	al 3) (C1) along Living ron (C4) in Tilled ints (D1) rks) Wetl	Wa 4A, Dra Pro Satistic State Share FAG	ter-Stained Leaves (, and 4B) inage Patterns (B10 -Season Water Table uration Visible on Ae omorphic Position (D allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6 st-Heave Hummocks	(B9) (MLRA 1, 2,) e (C2) erial Imagery (C9) (22) (3) (LRR A) (5) (LRR A)

- Souther I for savor Dr co	y/County: Clackamas	Sampling Date: 08/13/9024
	State: WA Sampling I	- MA
Applicant/Owner: Sesler Fasms	Section, Township, Range:	Name of the last o
Investigator(s): Landform (hillslope, terrace, etc.):	The state of the s	
Subregion (LRR): A Lat	: 45,42069 Long: -172, 42	
Soil Map Unit Name: Borns teat		VI classification:
Are climatic / hydrologic conditions on the site typical		(If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology		rmal Circumstances" present? YesNo
Are Vegetation , Soil , or Hydrology		f needed, explain any answers in Remarks.)
		ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Yes No No No		in a Wetland? Yes No
Wetland Hydrology Present? Yes No	7-7-	in a vicuality
Remarks:		To the state of th
VEGETATION - Use scientific names of	nlante	
VEGETATION - Ose scientific fightes of	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30' d.)	% Cover Species? Status	Number of Dominant Species
1.		That Are OBL, FACW, or FAC: (A)
2.		Total Number of Dominant
3.		Species Across Ali Strata: (B)
4	4.44	Percent of Dominant Species That Are OBL, FACW, or FAC: 37 (A/B)
		111111111111111111111111111111111111111
	= Total Cover	Describence Index weaksheets
Sapling/Shrub Stratum (Plot size: 20' d.)	1 15 100	Prevalence Index worksheet:
1. P. Ninebark (P. Capitatus)	N FEW	Total % Cover of: Multiply by:
2. HBJOCK CK CISCOLOG	70 Y FAC	OBL species x 1 =
3. E. Black (K. laciniatus)	JO N FACU	FACW species x 2 =
4		FAC species x 3 =
5.	31	FACU species x 4 =
Land to the second second second	= Total Cover	UPL species x 5 =
Herb Stratum (Plot size: 10'd.)	35 V EARLY	Column Totals: (A) (B)
1. Cypidented	2/ Chil	Prevalence Index = B/A =
3. Chistle Company	10 N FAC	Prevalence Index = B/A =
101111	10 N FALL	Hydrophytic Vegetation Indicators:
5. Oxeve Lossy (H- belignthouse	N FACU	
6. Organ (M. agua clum)	TE N Sell	1 - Rapid Test for Hydrophytic Vegetation
7.	- THEW	2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹
8.		4 - Morphological Adaptations¹ (Provide supporting
0		data in Remarks or on a separate sheet)
10		5 - Wetland Non-Vascular Plants ¹
11.		Problematic Hydrophytic Vegetation¹ (Explain)
	100 = Total Cover	¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size:)		be present, unless disturbed or problematic.
1.		
2.		
	= Total Cover	Hydrophytic Vegetation
% Bare Ground in Herb Stratum		Present? Yes No
Remarks:		

Profile Description: (D		o the depti	i needed to docum	Redox Fea	tures			•
Depth (inches) Color (m	Matrix	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
inches) Color (m	1000	70					dil.	
6 7.5 Y	100/	100		_			2160	
R II	11 3/2	98	4/4	22			5140	
7540	200	00	-1. +VO 1//1	1 /	in a IN		8.14	
10 7546	17/8	05	TO11-7/4	17	MIN		2140	
1-10 7.5 VI	R77-	25	4/,	9	63	W	5160)
	11/7	10	16				2.1.	
	4/4	10					2116	-
as IDYC	1/4	and his	9//	5	(M	C 51	
-	212	7	5/2	K	65	M	1101	
	115	2	-46					-
		-						
ype: C=Concentration	n, D=Dep	letion, RM=I	Reduced Matrix, CS	S=Covered	or Coated Sa	nd Grains.	² Location: PL=Por	e Lining, M=Matrix
lydric Soil Indicators	: (Applic	able to all	LRRs, unless other	rwise note	d.)	Ind	icators for Problema	tic Hydric Soils ³ :
Histosol (A1)			Sandy Redox (S				2 cm Muck (A10)	
Histic Epipedon (A2	2)	-	Stripped Matrix			_	Red Parent Material (TF2)
Black Histic (A3)	-/	-	Loamy Mucky M		(except MLR		Very Shallow Dark Si	
Hydrogen Sulfide (/	A4)	_	Loamy Gleyed N			-	Other (Explain in Ren	
Depleted Below Da		e (A11)	Depleted Matrix	(F3)				
Thick Dark Surface	(A12)		Redox Dark Sur	face (F6)			3Indicators of hydroph	
Sandy Mucky Mine	ral (S1)		Depleted Dark S	Surface (F7)	(wetland hydrology me	
Sandy Gleyed Matr	rix (S4)		Redox Depressi	ions (F8)			unless disturbed or p	roblematic
estrictive Layer (if pres	sent):				I the state Co	1 D	Van	No X
Type:					Hydric So	il Present?	Yes	NO _
Depth (inches):								
narks: High o	hram	9			1			
DROLOGY		9			1			
DROLOGY etland Hydrology Indic	cators:		sheek all that anniv		1	Sem	ndary Indicators (2 or	more required)
DROLOGY etland Hydrology India	cators:				B9) (except		ndary Indicators (2 or	
DROLOGY etland Hydrology Indicators (minim	cators:		Water-Stain	ed Leaves (B9) (except	V	Vater-Stained Leaves	
DROLOGY etiand Hydrology Indicators (minim Surface Water (A1)	cators:		Water-Stain MLRA 1, 2,	ed Leaves (4A, and 4E		V 4	Vater-Stained Leaves A, and 4B)	(B9) (MLRA 1, 2,
DROLOGY Indicators (minimary Indicators (minimary Surface Water (A1) High Water Table (A2)	cators:		Water-Stain MLRA 1, 2, Salt Crust (E	ed Leaves (4A, and 4B 311)	3)	4	Vater-Stained Leaves A, and 4B) Prainage Patterns (B10	(B9) (MLRA 1, 2,
DROLOGY otland Hydrology India mary Indicators (minim Surface Water (A1) High Water Table (A2) Saturation (A3)	cators:		Water-Stain MLRA 1, 2,	ed Leaves (4A, and 4B 311) ertebrates (B	313)	_ 4 _ D	Vater-Stained Leaves A, and 4B) Prainage Patterns (B10 Pry-Season Water Tab	(B9) (MLRA 1, 2, 0) le (C2)
DROLOGY otland Hydrology Indice mary Indicators (minim Surface Water (A1) High Water Table (A2)	cators:		Water-Staine MLRA 1, 2, Salt Crust (E Aquatic Inve	ed Leaves (4A, and 4B 311) ertebrates (E ulfide Odor	313)	_ 4 _ D	Vater-Stained Leaves A, and 4B) Prainage Patterns (B10	(B9) (MLRA 1, 2, 0) le (C2)
DROLOGY Patland Hydrology India mary Indicators (minim Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	cators: num of one		Water-Staine MLRA 1, 2, Salt Crust (E Aquatic Inve	ed Leaves (4A, and 4B 311) ertebrates (E ulfide Odor	313) (C1)		Vater-Stained Leaves A, and 4B) Prainage Patterns (B10 Pry-Season Water Tab	(B9) (MLRA 1, 2, 0) ele (C2) erial Imagery (C9)
DROLOGY otland Hydrology India mary Indicators (minim Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	cators: num of one		Water-Stain MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Roots (C3) Presence of	ed Leaves (4A, and 4E 311) ertebrates (E ulfide Odor izospheres	313) (C1) along Living		Vater-Stained Leaves A, and 4B) Prainage Patterns (B10 Pry-Season Water Table Eaturation Visible on A	(B9) (MLRA 1, 2, 0) ele (C2) erial Imagery (C9)
DROLOGY otland Hydrology India mary Indicators (minim Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3)	cators: num of one		Water-Stain MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Roots (C3) Presence of Recent Iron	ed Leaves (4A, and 4E 311) ertebrates (E ulfide Odor izospheres	313) (C1) along Living		Vater-Stained Leaves A, and 4B) Prainage Patterns (B10 Pry-Season Water Table Eaturation Visible on A Geomorphic Position (I Shallow Aquitard (D3)	(B9) (MLRA 1, 2, 0) ele (C2) erial Imagery (C9)
DROLOGY Patland Hydrology India mary Indicators (minim Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	cators: num of one		Water-Stain MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6)	ed Leaves (4A, and 4E 311) ertebrates (E ulfide Odor nizospheres Reduced II Reduction i	313) (C1) along Living ron (C4) in Tilled		Vater-Stained Leaves A, and 4B) Prainage Patterns (B10 Pry-Season Water Table Eaturation Visible on A Geomorphic Position (I	(B9) (MLRA 1, 2, 0) ele (C2) erial Imagery (C9)
DROLOGY Strand Hydrology India mary Indicators (minim Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4)	cators: num of one		Water-Stain MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S	ed Leaves (4A, and 4E 311) ertebrates (E ulfide Odor nizospheres Reduced II Reduction i	313) (C1) along Living ron (C4) in Tilled	V 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Vater-Stained Leaves A, and 4B) Prainage Patterns (B10 Pry-Season Water Table Eaturation Visible on A Geomorphic Position (I Shallow Aquitard (D3) FAC-Neutral Test (D5)	(B9) (MLRA 1, 2, 0) ole (C2) erial Imagery (C9) 02)
DROLOGY etland Hydrology Individual Indicators (minimal Indicator	cators: num of one		Water-Stain MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A)	ed Leaves (4A, and 4B 311) ertebrates (B ulfide Odor nizospheres Reduced II Reduction i	313) (C1) along Living ron (C4) in Tilled	V 4 1 D D S S S S S S S S S S S S S S S S S	Vater-Stained Leaves A, and 4B) Drainage Patterns (B10 Dry-Season Water Table Eaturation Visible on A Geomorphic Position (I Shallow Aquitard (D3) EAC-Neutral Test (D5) Raised Ant Mounds (D6)	(B9) (MLRA 1, 2, 0) ole (C2) erial Imagery (C9) 02)
DROLOGY Stland Hydrology Indicators (minimary Indicators (Material Indi	cators: num of one	e required; o	Water-Stain MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S	ed Leaves (4A, and 4B 311) ertebrates (B ulfide Odor nizospheres Reduced II Reduction i	313) (C1) along Living ron (C4) in Tilled	V 4 1 D D S S S S S S S S S S S S S S S S S	Vater-Stained Leaves A, and 4B) Prainage Patterns (B10 Pry-Season Water Table Eaturation Visible on A Geomorphic Position (I Shallow Aquitard (D3) FAC-Neutral Test (D5)	(B9) (MLRA 1, 2, 0) ole (C2) erial Imagery (C9) 02)
DROLOGY Itland Hydrology India mary Indicators (minim Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B1) Inundation Visible on A	cators: num of one) 2) 4) Aerial Ima	e required; o	Water-Stain MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A) Other (Explain	ed Leaves (4A, and 4B 311) ertebrates (B ulfide Odor nizospheres Reduced II Reduction i	313) (C1) along Living ron (C4) in Tilled	V 4 1 D D S S S S S S S S S S S S S S S S S	Vater-Stained Leaves A, and 4B) Drainage Patterns (B10 Dry-Season Water Table Eaturation Visible on A Geomorphic Position (I Shallow Aquitard (D3) EAC-Neutral Test (D5) Raised Ant Mounds (D6)	(B9) (MLRA 1, 2, 0) ole (C2) erial Imagery (C9) 02)
DROLOGY Stland Hydrology Indicators (minimary Indicators (May) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B5)	cators: num of one) 2) 4) Aerial Ima	e required; o	Water-Stain MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A) Other (Explain	ed Leaves (4A, and 4B 311) ertebrates (B ulfide Odor nizospheres Reduced II Reduction i	313) (C1) along Living ron (C4) in Tilled	V 4 1 D D S S S S S S S S S S S S S S S S S	Vater-Stained Leaves A, and 4B) Drainage Patterns (B10 Dry-Season Water Table Eaturation Visible on A Geomorphic Position (I Shallow Aquitard (D3) EAC-Neutral Test (D5) Raised Ant Mounds (D6)	(B9) (MLRA 1, 2, 0) ole (C2) erial Imagery (C9) 02)
DROLOGY etland Hydrology Individual Indicators (minimal Indicators	cators: num of one) 2) 4) Aerial Ima	e required; o	Water-Stain MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A) Other (Explain	ed Leaves (4A, and 4B 311) ertebrates (B ulfide Odor nizospheres Reduced II Reduction i	313) (C1) along Living ron (C4) in Tilled	V 4 1 D D S S S S S S S S S S S S S S S S S	Vater-Stained Leaves A, and 4B) Drainage Patterns (B10 Dry-Season Water Table Eaturation Visible on A Geomorphic Position (I Shallow Aquitard (D3) EAC-Neutral Test (D5) Raised Ant Mounds (D6)	(B9) (MLRA 1, 2, 0) ole (C2) erial Imagery (C9) 02)
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DROLOGY etland Hydrology Individual Indicators (minimal Indicators	cators: num of one) (2) (3) (4) (5) (6) (6) (7) (7) (7)	e required; of gery (B7) urface (B8)	Water-Stain MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A) Other (Expla	ed Leaves (4A, and 4B 311) Interprates (E ulfide Odor izospheres Reduced II Reduction i Stressed Pla ain in Rema	ants (D1)	V 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Vater-Stained Leaves A, and 4B) Prainage Patterns (B10 Pry-Season Water Table attraction Visible on A Recomorphic Position (Intraction Visible on A Recomorphic Position Visible on A Recomorphic Position (Intraction Visible on A Recomorphic Position Vis	(B9) (MLRA 1, 2, 0) ole (C2) erial Imagery (C9) 02) 6) (LRR A) cs (D7)
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DROLOGY Diland Hydrology India mary Indicators (minim Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B1) Iron Deposits (B5) Surface Soil Cracks (B1) Sparsely Vegetated Colored (B4) Dirit Deposits (B5) Surface Soil Cracks (B1) Sparsely Vegetated Colored (B4) Dirit Deposits (B5) Surface Soil Cracks (B1) Sparsely Vegetated Colored (B4) Dirit Deposits (B5) Surface Soil Cracks (B1) Sparsely Vegetated Colored (B4) Dirit Deposits (B5) Surface Soil Cracks (B4) Sparsely Vegetated Colored (B4) Dirit Deposits (B5) Surface Soil Cracks (B4) Sparsely Vegetated Colored (B4) Dirit Deposits (B5) Surface Soil Cracks (B4) Sparsely Vegetated Colored (B4) Dirit Deposits (B5) Surface Soil Cracks (B4) Dirit Deposits (B5) Dirit Deposits (B5) Surface Soil Cracks (B4) Dirit Deposits (B5) D	cators: num of one 2) 36) Aerial Ima oncave S Yes Yes	e required; of	Water-Stain MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A) Other (Expla	ed Leaves (4A, and 4B 311) ertebrates (Bulfide Odor izospheres Reduced In Reduction i Stressed Platain in Remains in Rem	313) (C1) along Living ron (C4) in Tilled ants (D1) rks) Wet	V 4 D D S S S S S S S S S S S S S S S S S	Vater-Stained Leaves A, and 4B) Prainage Patterns (B10 Pry-Season Water Table attraction Visible on A Recomorphic Position (Installow Aquitard (D3) PAC-Neutral Test (D5) Raised Ant Mounds (District-Heave Hummock Prost-Heave Hummock Prost-Heave Present?	(B9) (MLRA 1, 2, 0) ole (C2) erial Imagery (C9) 02) 6) (LRR A) cs (D7)
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- Lucy Sactor Laramas	clackamas	Sampling Date: 08/13/2024
Applicant/Owner: Sester Forms	State: WA Sam	pling Point.
	Section, Township, Range: Local relief (concave, conv	vex, none): 5/5/00 Slope (%): 4
Landform (hillslope, terrace, etc.): Terrou		, 4211 2 Datum: WGS84
	15-9/010 Long: 2122	14
Soil Map Unit Name: Bornstedt		
Are climatic / hydrologic conditions on the site typical		No (If no, explain in Remarks.)
Are Vegetation , Soil, or Hydrology		re "Normal Circumstances" present? Yes No
Are Vegetation , Soil , or Hydrology	naturally problematic?	(If needed, explain any answers in Remarks.)
CUMMARY OF FINDINGS Attach site of	nan ehowing eamnling no	int locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No		int locations, transcets, important reactives, etc.
Hydric Soil Present? Yes No		within a Wetland? Yes No
Wetland Hydrology Present? Yes No	X	
Remarks:		
VEGETATION - Use scientific names of	plants.	
	Absolute Dominant Indica	
Tree Stratum (Plot size: 30' d.)	% Cover Species? Stat	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
1.		
2.		Total Number of Dominant Species Across All Strata: (B)
3.	***	Percent of Dominant Species 77
4.		That Are OBL, FACW, or FAC: (A/B)
	= Total Cover	Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 20' d.)	110 8 50	
1. H. Black (K. disolar)	40 L	Total % Cover of: Multiply by:
2. E. Black (K. Jaciniatus)	10 1	OBL species x 1 =
3.		FACW species x 2 =
4.	with the same of t	FAC species x 3 =
5		FACU species x 4 =
	= Total Cover	UPL species x 5 =
Herb Stratum (Plot size: 10' d.)	F 10 -	Column Totals: (A) (B)
1. Vernal (H. Odoratum)	20 T 1A	cu
2. Ofislace (D. Carota)	5 N FA	Prevalence Index = B/A =
3. Galdenrod (Sol. Sp)	5 N FA	Cl.
4. Remoort (Sericio Vulgaris	12 N FAC	Hydrophytic Vegetation Indicators:
5.		1 - Rapid Test for Hydrophytic Vegetation
6.	desire and the second s	2 - Dominance Test is >50%
7	- 2	3 - Prevalence Index is ≤3.01
8		4 - Morphological Adaptations ¹ (Provide supporting
9.		data in Remarks or on a separate sheet)
10.		5 - Wetland Non-Vascular Plants ¹
11		Problematic Hydrophytic Vegetation¹ (Explain)
	= Total Cover	¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size:)	-	be present, unless disturbed or problematic.
1.		
2.		Lhudrombudia
	= Total Cover	Hydrophytic Vegetation
% Bare Ground in Herb Stratum		Present? Yes No _X
Remarks:)		
remarks: Logged/tilled) mou	ra	
)

Profile Description: (Describe to the Depth Matrix	Redox Fea	itures			
inches) Color (moist) %	Color (moist) %	Type ¹	Loc ²	Texture	Remarks
- K 7540 25/2 10	(A)	_	- 5	160	
2 14075/20	4/1 10		00 3	110	Hard
- 11 +5 4 K 20/3 91	2, 16 10	-	111	160	1,154,67
1-12 Exed P	ed wicharcoal				
3/ 9/	A 1 W, 10		(-161	
1/3 11	0 - 16 -10	***************************************			
					-
Type: C=Concentration, D=Depletion,	RM=Reduced Matrix CS=Covered	or Coated Sand	Grains. ² Loc	ation: PL=Pore	Lining, M=Matrix.
					ic Hydric Soils ³ :
Hydric Soil Indicators: (Applicable		eu.)			ic riyunc oons .
Histosol (A1)	Sandy Redox (S5)		anaphinometers:	luck (A10)	(E2)
Histic Epipedon (A2)	Stripped Matrix (S6) Loamy Mucky Mineral (F1)	/ovcont MI PA	-	rent Material (Thallow Dark Su	
Black Histic (A3) Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	(except milita		Explain in Rem	
Depleted Below Dark Surface (A1)				Explain in Front	u)
Thick Dark Surface (A12)	Redox Dark Surface (F6)		3Indica	tors of hydrophy	ytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7))	wetlan	hydrology mu	st be present,
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)		unless	disturbed or pro	oblematic
estrictive Layer (If present):					1
Type:		Hydric Soil	Present? Y	es	No X
Depth (inches):	and the second s	1.7	200000000000000000000000000000000000000		
Depth (money):					
marks: High Chroma	, fire pit area				
· · · · · · · · · · · · · · · · · · ·	, fire pit area				
DROLOGY	,		Sacandary	adiantam /2 or r	nora mauimad)
DROLOGY	nired; check all that apply)	(RQ) (aveant		ndicators (2 or r	
DROLOGY etland Hydrology Indicators: rimary Indicators (minimum of one requ	nired; check all that apply) Water-Stained Leaves		Water-S	ained Leaves (nore required) B9) (MLRA 1, 2,
DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one requ Surface Water (A1)	nired; check all that apply) Water-Stained Leaves MLRA 1, 2, 4A, and 4E		Water-St 4A, and	ained Leaves (4B)	B9) (MLRA 1, 2,
DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one requisers Water (A1) High Water Table (A2) Saturation (A3)	nired; check all that apply) Water-Stained Leaves	3)	Water-Si 4A, and Drainage	ained Leaves (B9) (MLRA 1, 2,
DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one requirements Surface Water (A1) High Water Table (A2)	wired; check all that apply) Water-Stained Leaves of MLRA 1, 2, 4A, and 4E Salt Crust (B11) Aquatic Invertebrates (Invertebrates (Inverteb	B13) (C1)	Water-Si 4A, and Drainage Dry-Sea	ained Leaves (4B) Patterns (B10) son Water Table	B9) (MLRA 1, 2,
DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one requisited water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	wired; check all that apply) Water-Stained Leaves of MLRA 1, 2, 4A, and 4E Salt Crust (B11) Aquatic Invertebrates (Invertebrates (Invertebra	B13) (C1)	Water-S 4A, and Drainage Dry-Sea Saturation	ained Leaves (4B) Patterns (B10) son Water Table on Visible on Ae	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9)
DROLOGY letland Hydrology Indicators: rimary Indicators (minimum of one requisited Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	wired; check all that apply) Water-Stained Leaves (MLRA 1, 2, 4A, and 4E Salt Crust (B11) Aquatic Invertebrates (I Hydrogen Sulfide Odor Oxidized Rhizospheres Roots (C3)	B13) (C1) along Living	Water-S 4A, and Drainage Dry-Sea Saturation Geomore	ained Leaves (4B) Patterns (B10) son Water Table on Visible on Ae phic Position (D	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9)
DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one requisited water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	wired; check all that apply) Water-Stained Leaves (MLRA 1, 2, 4A, and 4E Salt Crust (B11) Aquatic Invertebrates (I Hydrogen Sulfide Odor Oxidized Rhizospheres Roots (C3) Presence of Reduced II	B13) (C1) along Living	Water-S 4A, and Drainage Dry-Sea Saturation Geomore	ained Leaves (4B) Patterns (B10) son Water Table on Visible on Ae	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9)
EDROLOGY Tetland Hydrology Indicators: rimary Indicators (minimum of one requisited Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	wired; check all that apply) Water-Stained Leaves (MLRA 1, 2, 4A, and 4E Salt Crust (B11) Aquatic Invertebrates (I Hydrogen Sulfide Odor Oxidized Rhizospheres Roots (C3) Presence of Reduced In Recent Iron Reduction	B13) (C1) along Living	Water-S 4A, and Drainage Dry-Sea Saturation Geomory Shallow	ained Leaves (4B) Patterns (B10) son Water Table on Visible on Ae phic Position (D Aquitard (D3)	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9)
POROLOGY Vetland Hydrology Indicators: rimary Indicators (minimum of one requisited Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	water-Stained Leaves (MLRA 1, 2, 4A, and 4E) Salt Crust (B11) Aquatic Invertebrates (I) Hydrogen Sulfide Odor Oxidized Rhizospheres Roots (C3) Presence of Reduced II Recent Iron Reduction Soils (C6)	B13) (C1) along Living ron (C4) in Tilled	Water-S 4A, and Drainage Dry-Sea Saturation Geomory Shallow	ained Leaves (4B) Patterns (B10) son Water Table on Visible on Ae phic Position (D	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9)
POROLOGY Vertland Hydrology Indicators: rimary Indicators (minimum of one requisited Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	wired; check all that apply) Water-Stained Leaves (MLRA 1, 2, 4A, and 4E Salt Crust (B11) Aquatic Invertebrates (I Hydrogen Sulfide Odor Oxidized Rhizospheres Roots (C3) Presence of Reduced In Recent Iron Reduction	B13) (C1) along Living ron (C4) in Tilled	Water-S 4A, and Drainage Dry-Sea Saturation Geomory Shallow FAC-Nei	ained Leaves (4B) Patterns (B10) son Water Table on Visible on Ae phic Position (D Aquitard (D3)	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9) 2)
POROLOGY Vetland Hydrology Indicators: rimary Indicators (minimum of one requisited Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	water-Stained Leaves (MLRA 1, 2, 4A, and 4E) Salt Crust (B11) Aquatic Invertebrates (I) Hydrogen Sulfide Odor Oxidized Rhizospheres Roots (C3) Presence of Reduced II Recent Iron Reduction Soils (C6) Stunted or Stressed Pla	B13) (C1) along Living ron (C4) in Tilled ants (D1)	Water-S 4A, and Drainage Dry-Sea Saturatio Geomon Shallow FAC-Net	ained Leaves (4B) Patterns (B10) son Water Table on Visible on Ae phic Position (D Aquitard (D3)	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9) 2)
Etland Hydrology Indicators: imary Indicators (minimum of one requisitions) 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	water-Stained Leaves (MLRA 1, 2, 4A, and 4E) — Salt Crust (B11) — Aquatic Invertebrates (Invertebrates (Invertebrates) — Hydrogen Sulfide Odor Oxidized Rhizospheres — Roots (C3) — Presence of Reduced Invertebrates (Invertebrates) — Recent Iron Reduction (Soils (C6)) — Stunted or Stressed Plate (LRR A) — Other (Explain in Remains)	B13) (C1) along Living ron (C4) in Tilled ants (D1)	Water-S 4A, and Drainage Dry-Sea Saturatio Geomon Shallow FAC-Net	ained Leaves (4B) Patterns (B10) on Water Table on Visible on Ae Ohic Position (D Aquitard (D3) utral Test (D5)	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9) 2)
Etland Hydrology Indicators: imary Indicators (minimum of one requisitions) 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)	water-Stained Leaves (MLRA 1, 2, 4A, and 4E) — Salt Crust (B11) — Aquatic Invertebrates (Invertebrates (Invertebrates) — Hydrogen Sulfide Odor Oxidized Rhizospheres — Roots (C3) — Presence of Reduced Invertebrates (Invertebrates) — Recent Iron Reduction (Soils (C6)) — Stunted or Stressed Plate (LRR A) — Other (Explain in Remains)	B13) (C1) along Living ron (C4) in Tilled ants (D1)	Water-S 4A, and Drainage Dry-Sea Saturatio Geomon Shallow FAC-Net	ained Leaves (4B) Patterns (B10) on Water Table on Visible on Ae Ohic Position (D Aquitard (D3) utral Test (D5)	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9) 2)
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EDROLOGY etland Hydrology Indicators: imary Indicators (minimum of one requisited Marker (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 Surface) eld Observations: urface Water Present? Ves Vater Table Present? Ves Vater Table Present? Ves Vater Table Present? Ves Ves Vers Ves Vers Ves Vers Ves Ves Ves Ves Ves Ves Ves Ves Ves Ve	Water-Stained Leaves MLRA 1, 2, 4A, and 4E Salt Crust (B11) Aquatic Invertebrates (I Hydrogen Sulfide Odor Oxidized Rhizospheres Roots (C3) Presence of Reduced In Recent Iron Reduction Soils (C6) Stunted or Stressed Pla (LRR A) Other (Explain in Remains) (B7) (B8) No Depth (inches): No Depth (inches):	B13) (C1) along Living ron (C4) in Tilled ants (D1) arks) Wetla	Water-S 4A, and Drainage Dry-Sea Saturatio Geomon Shallow FAC-Nei Raised A Frost-He	ained Leaves (4B) Patterns (B10) Son Water Table In Visible on Ae Phic Position (D Aquitard (D3) Itral Test (D5) Int Mounds (D6) ave Hummocks	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9) 2)) (LRR A) 5 (D7)
DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one requivalent of the property of the prope	Water-Stained Leaves MLRA 1, 2, 4A, and 4E Salt Crust (B11) Aquatic Invertebrates (I Hydrogen Sulfide Odor Oxidized Rhizospheres Roots (C3) Presence of Reduced In Recent Iron Reduction Soils (C6) Stunted or Stressed Pla (LRR A) Other (Explain in Remains) (B7) (B8) No Depth (inches): No Depth (inches):	B13) (C1) along Living ron (C4) in Tilled ants (D1) arks) Wetla	Water-S 4A, and Drainage Dry-Sea Saturatio Geomon Shallow FAC-Nei Raised A Frost-He	ained Leaves (4B) Patterns (B10) Son Water Table In Visible on Ae Phic Position (D Aquitard (D3) Itral Test (D5) Int Mounds (D6) ave Hummocks	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9) 2)) (LRR A) 5 (D7)

Applicant/Owner: Sester Forms Investigator(s): Revewer Landform (hillslope, terrace, etc.): Subregion (LRR): A Lat Soil Map Unit Name: Rorn Sect D Are climatic / hydrologic conditions on the site typical Are Vegetation Soil or Hydrology Are Vegetation Soil or Hydrology	t: 45.42112 Long: 122.420 NW I for this time of year? Yes No significantly disturbed? Are "Nor naturally problematic? (If map showing sampling point to so the sampled Area withing the sampled Are	Point:
VEGETATION - Use scientific names of	f plants.	
Tree Stratum (Plot size: 30' d.) 1 2 3 4	Absolute Dominant Indicator % Cover Species? Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: (A) (B)
Sapling/Shrub Stratum (Plot size: 20'd.) 1. #Black (R. discolos) 2. Dine has R. P. Capitarius 3. E. Black (R. lacinia fus 4.	= Total Cover 45 Y FAC 2 N FACW 10 Y FACU	Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 = FACW species x 2 = FAC species x 3 =
Herb Stratum (Plot size: 10'd.) 1. Vernal (A. Orono Tum) 2. Br tern (Pt. aguillaum)	57 = Total Cover 25 Y FACU 15 Y FACU	FACU species
3		Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain)
11	= Total Cover	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
% Bare Ground in Herb Stratum	= Total Cover	Hydrophytic Vegetation Present? Yes No A
Remarks: oriental Spruce? Nutgrass/sedge?	2% - Flat sedge	cyperus conglamentation

II.				Sampling Poir	t Sesler DPO
IL Profile Description: (Describe to the	e denth needed to docu	ment the indicator	or confirm the at	sence of indicators	.)
	le depair needed to dood.	Redox Features			
Deptil	% Color (moist)	% Туре	¹ Loc ²	Texture	Remarks
inches) Color (moist)	70			6,10	No dotte
12 +5160/2 11	00			27 10	Gallo
-10 7 EVE 3/21	90 4/1	9	M	5110	-tirec rac
- (() T.311 -15 T	10 /6	14	_	110	11
5-18+ EVR4/6 1	00	-	-	C/51_	Charcoox
2 100 21116 -					
			_		
			_		
	- DM-Dadward Matrix C	S=Covered or Coate	d Sand Grains	² Location: PL=Por	e Lining, M=Matrix.
Type: C=Concentration, D=Depletion	n, RM=Reduced Matrix, C	5=Covered or Coate			
Hydric Soil Indicators: (Applicabl	e to all I RRs unless oth	erwise noted.)	Indi	cators for Problema	tic Hydric Soils3:
Hydric Soil indicators. (Applicable					
Histosol (A1)	Sandy Redox (2 cm Muck (A10)	TEO
Histic Epipedon (A2)	Stripped Matrix	(S6)		Red Parent Material	(172)
Black Histic (A3)	Loamy Mucky	Mineral (F1) (except	MLRA 1)	Very Shallow Dark S	urface (TF12)
Hydrogen Sulfide (A4)	Loamy Gleyed	Matrix (F2)		Other (Explain in Rer	narks)
Depleted Below Dark Surface (A					
Thick Dark Surface (A12)	Redox Dark Su			Indicators of hydropi	
Sandy Mucky Mineral (S1)	Depleted Dark			wetland hydrology m	ust be present,
Sandy Middey Matrix (S4)	Redox Depress			unless disturbed or p	roblematic
Sandy Gleyed Wattix (04)		1			
- to the standard (16 managet):					10
estrictive Layer (if present):		10.4	- C-U D	Van	No X
Type:		Hydr	ic Soil Present?	Yes	NO _
Depth (inches):					
		The state of the s			
marks: High Chromo	/Fired Pe	d		1241	
man One ma	/Fired Pe	d			
DROLOGY	/Fired Pe	d			
DROLOGY etland Hydrology Indicators:	7		0000	der Indicators (2 o	amoro required)
DROLOGY etland Hydrology Indicators:	equired; check all that apply	()		ndary Indicators (2 or	
DROLOGY etland Hydrology Indicators:	equired; check all that apply Water-Stai	y) ned Leaves (B9) (ex	cept V	ater-Stained Leaves	
DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one re	equired; check all that apply Water-Stai	y) ned Leaves (B9) (ex	cept V	ater-Stained Leaves A, and 4B)	(B9) (MLRA 1, 2,
DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one re	equired; check all that apply Water-StaiMLRA 1, 2 Salt Crust	r) ned Leaves (B9) (ex s, 4A , and 4B) (B11)	cept V	ater-Stained Leaves A, and 4B) rainage Patterns (B1	(B9) (MLRA 1, 2, 0)
DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one re Surface Water (A1) High Water Table (A2)	equired; check all that apply Water-StaiMLRA 1, 2 Salt Crust	r) ned Leaves (B9) (ex s, 4A , and 4B) (B11)	cept V	/ater-Stained Leaves A, and 4B) rainage Patterns (B1 ry-Season Water Tal	(B9) (MLRA 1, 2, 0) ble (C2)
DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one re Surface Water (A1) High Water Table (A2) Saturation (A3)	equired; check all that apply Water-StaiMLRA 1, 2Salt Crust Aquatic Inv	r) ned Leaves (B9) (ex 4, 4A, and 4B) (B11) rertebrates (B13)	cept V	ater-Stained Leaves A, and 4B) rainage Patterns (B1	(B9) (MLRA 1, 2, 0) ble (C2)
DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one re Surface Water (A1) High Water Table (A2)	equired; check all that apply Water-Stai MLRA 1, 2 Salt Crust Aquatic Inv. Hydrogen	r) ned Leaves (B9) (ex s, 4A , and 4B) (B11)	Cept W 4,	/ater-Stained Leaves A, and 4B) rainage Patterns (B1 ry-Season Water Tal	(B9) (MLRA 1, 2, 0) ble (C2)
DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	equired; check all that apply Water-Stai MLRA 1, 2 Salt Crust Aquatic Inv Hydrogen Oxidized R	ned Leaves (B9) (ex 1, 4A, and 4B) (B11) vertebrates (B13) Sulfide Odor (C1) thizospheres along L	cept W 4. D D S	/ater-Stained Leaves A, and 4B) rainage Patterns (B1 ry-Season Water Tal	(B9) (MLRA 1, 2, 0) ole (C2) verial Imagery (C9)
DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	equired; check all that apply Water-Stai MLRA 1, 2 Salt Crust Aquatic Inv Hydrogen Oxidized R Roots (C3)	ned Leaves (B9) (ex 1, 4A, and 4B) (B11) vertebrates (B13) Sulfide Odor (C1) thizospheres along L	cept W 4. D D S siving	later-Stained Leaves A, and 4B) rainage Patterns (B1 ry-Season Water Tal aturation Visible on A	(B9) (MLRA 1, 2, 0) ole (C2) verial Imagery (C9)
DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	equired; check all that apply Water-Stai MLRA 1, 2 Salt Crust Aquatic Inv Hydrogen Oxidized R Roots (C3) Presence of	ned Leaves (B9) (ex 4, 4A, and 4B) (B11) vertebrates (B13) Sulfide Odor (C1) thizospheres along L	cept W 4. D S iving G S	later-Stained Leaves A, and 4B) rainage Patterns (B1 ry-Season Water Tal aturation Visible on A eomorphic Position ((B9) (MLRA 1, 2, 0) ole (C2) verial Imagery (C9)
DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	equired; check all that apply Water-Stai MLRA 1, 2 Salt Crust Aquatic Inv Hydrogen 6 Oxidized 8 Roots (C3) Presence 6 Recent Iro	ned Leaves (B9) (ex 1, 4A, and 4B) (B11) vertebrates (B13) Sulfide Odor (C1) thizospheres along L	cept W 4. D S iving	Vater-Stained Leaves A, and 4B) rainage Patterns (B1 ry-Season Water Tal aturation Visible on A eomorphic Position (hallow Aquitard (D3)	(B9) (MLRA 1, 2, 0) ole (C2) herial Imagery (C9) D2)
DROLOGY Tetland Hydrology Indicators: Timary Indicators (minimum of one reserved) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	equired; check all that apply Water-Stai MLRA 1, 2 Salt Crust Aquatic Inv Hydrogen Oxidized B Roots (C3) Presence of Recent Iro Soils (C6)	ned Leaves (B9) (ex 1, 4A, and 4B) (B11) vertebrates (B13) Sulfide Odor (C1) thizospheres along L of Reduced Iron (C4) In Reduction in Tilled	cept W 4. D D S iving G S	later-Stained Leaves A, and 4B) rainage Patterns (B1 ry-Season Water Tal aturation Visible on A eomorphic Position ((B9) (MLRA 1, 2, 0) ole (C2) herial Imagery (C9) D2)
EDROLOGY Setland Hydrology Indicators: Imary Indicators (minimum of one reserved) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	equired; check all that apply Water-Stai MLRA 1, 2 Salt Crust Aquatic Inv Hydrogen Oxidized R Roots (C3) Presence Recent Iro Soils (C6) Stunted or	ned Leaves (B9) (ex 4, 4A, and 4B) (B11) vertebrates (B13) Sulfide Odor (C1) thizospheres along L	cept W 4. D D S iving S F)	Vater-Stained Leaves A, and 4B) rainage Patterns (B1 ry-Season Water Tal aturation Visible on A eomorphic Position (hallow Aquitard (D3) AC-Neutral Test (D5)	(B9) (MLRA 1, 2, 0) ole (C2) herial Imagery (C9) D2)
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DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one re 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)	equired; check all that apply Water-Stai MLRA 1, 2 Salt Crust Aquatic Inv Hydrogen Oxidized R Roots (C3) Presence of Recent Iroo Soils (C6) Stunted or (LRR A) Other (Exp	ned Leaves (B9) (ex , 4A, and 4B) (B11) rertebrates (B13) Sulfide Odor (C1) thizospheres along L of Reduced Iron (C4) in Reduction in Tilled Stressed Plants (D1	Cept	Vater-Stained Leaves A, and 4B) rainage Patterns (B1 ry-Season Water Tal aturation Visible on A eomorphic Position (hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D	(B9) (MLRA 1, 2, 0) ole (C2) uerial Imagery (C9) D2)
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		1 1
Project/Site: Sester Ci	ity/County: Clackamas	Sampling Date: 12/3/2024
Applicant/Owner: Sester Farms	State: WA Sampling	
Investigator(s): Paul Trone I R. Brewer		
Landform (hillslope, terrace, etc.): Terrace/	Local relief (concave, convex, no	one): 51000 Slope (%): 4
Subregion (LRR): A La	at: 45-42070 Long: - 122-47	2133 Datum: WGS84
Soil Map Unit Name: Delena		VI classification:
Are climatic / hydrologic conditions on the site typical		
Are Vegetation Soil V or Hydrology	significantly disturbed? Are "No	rmal Circumstances" present? Yes No
Are Vegetation , Soil , or Hydrology		f needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site	map showing sampling point lo	ocations, transects, important features, etc.
	ls the Sampled Area with	in a Wetland? Yes No
Hydric Soil Present? Yes N Wetland Hydrology Present? Yes N	lo X	ill a vvedalid:
TO SECURE OF THE PARTY OF THE P		
Remarks:		
	- T. M. T. Mar.	
VEGETATION – Use scientific names of	of plants.	
	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30' d.)	% Cover Species? Status	Number of Dominant Species
1		That Are OBL, FACW, or FAC: (A)
2.		Total Number of Dominant Species Across All Strata: (B)
3.		Species Across All Strata: (B) Percent of Dominant Species
4.		That Are OBL, FACW, or FAC: (A/B)
/	= Total Cover	Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 20' d.)		
1		Total % Cover of: Multiply by:
2		OBL species x 1 =
3.	-	FACW species x 2 =
4		FAC species x 3 =
5.	T-1-10	FACU species x 4 =
U. 1. 01 . 1	= Total Cover	UPL species x 5 =
Herb Stratum (Plot size: 10' d.)		Column Totals: (A) (B)
1	(-	Prevalence Index = B/A =
3.	-	Trevalence mack = Birt =
3.		Hydrophytic Vegetation Indicators:
5.	-	1 - Rapid Test for Hydrophytic Vegetation
		2 - Dominance Test is >50%
		3 - Prevalence Index is ≤3.0¹
7		4 - Morphological Adaptations ¹ (Provide supporting
		data in Remarks or on a separate sheet)
10.		5 - Wetland Non-Vascular Plants ¹
11.		Problematic Hydrophytic Vegetation ¹ (Explain)
	= Total Cover	¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size:)	/ 	be present, unless disturbed or problematic.
1		
2.		
· ·	= Total Cover	Hydrophytic Vegetation
% Bare Ground in Herb Stratum		Present? Yes No
Remarks:	1)	1 1 1
Remarks: Tilled - based	on soils thyard	logy+ past data
11100	,	

Depth	Matrix		needed to doc	Redox Fe	atures		absence of indicators	,
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-6	25 YR4/6	100					5160	FiredPer
5-12	5XR4/3	100					5160	
2-18	5464/3	100		_			5, 60	1
= =						\equiv		
Type: C=Cond	entration, D=Dep	letion, RM=R	educed Matrix,	CS=Covered	or Coated Sai	nd Grains.	² Location: PL=Pore	e Lining, M=Matrix.
Hydric Soil Inc	dicators: (Applic	able to all L	RRs, unless of	herwise not	ed.)	Ind	licators for Problema	tic Hydric Soils3:
Histosol (A Histic Epip Black Histic Hydrogen	1) edon (A2)		Sandy Redox Stripped Matr	(S5) ix (S6) Mineral (F1 d Matrix (F2)) (except MLR	A 1) =	2 cm Muck (A10) Red Parent Material (Very Shallow Dark St Other (Explain in Ren	urface (TF12)
Thick Dark Sandy Muc	Surface (A12) cky Mineral (S1)		Redox Dark S Depleted Dar	Surface (F6) k Surface (F	7)		³ Indicators of hydroph wetland hydrology mu	ust be present,
Sandy Gle	yed Matrix (S4)		Redox Depre	ssions (F8)	1		unless disturbed or pr	TODIETTALIC
estrictive Laye								N
Туре:					Hydric So	Il Present?	Yes	No
Depth (inches	gh Chrom	9						
DROLOGY	gh Chrom	9						
DROLOGY	gh Chrom		neck all that app	nly)		Seco	ondary Indicators (2 or	more required)
/DROLOGY /etland Hydrologimary Indicators	ogy Indicators:		Water-Sta	ained Leaves	(B9) (except	V	Vater-Stained Leaves	
TDROLOGY Vetland Hydrologimary Indicators Surface Water	ogy Indicators: s (minimum of one		Water-Sta MLRA 1,	ained Leaves 2, 4A, and 4		V 4	Vater-Stained Leaves (A, and 4B)	(B9) (MLRA 1, 2,
TDROLOGY Vetland Hydrologimary Indicators Surface Water High Water Ta	ogy Indicators: s (minimum of one r (A1) able (A2)		Water-Sta MLRA 1, Salt Crus	ained Leaves 2, 4A, and 4 t (B11)	B)	V	Vater-Stained Leaves (A, and 4B) Orainage Patterns (B10	(B9) (MLRA 1, 2,
POROLOGY Vetland Hydrologimary Indicators Surface Water	ogy Indicators: s (minimum of one r (A1) able (A2)		Water-Sta MLRA 1, Salt Crus Aquatic Ir Hydrogen	ained Leaves 2, 4A, and 4 t (B11) overtebrates Sulfide Odo	(B13) r (C1)	V	Vater-Stained Leaves (A, and 4B)	(B9) (MLRA 1, 2, 0) le (C2)
POROLOGY Vetland Hydrologimary Indicators Surface Water High Water Ta Saturation (A3 Water Marks (ogy Indicators: s (minimum of one r (A1) able (A2) B1)		Water-Sta MLRA 1, Salt Crus Aquatic Ir Hydrogen Oxidized	ained Leaves 2, 4A, and 4 (B11) evertebrates Sulfide Odo Rhizosphere	B) (B13)	V — 4 — D — D	Vater-Stained Leaves (A, and 4B) Orainage Patterns (B10 Ory-Season Water Tab Saturation Visible on A	(B9) (MLRA 1, 2, 0) le (C2) erial Imagery (C9)
POROLOGY Vetland Hydrology Surface Water High Water Ta Saturation (A3) Water Marks (Sediment Dep	ogy Indicators: s (minimum of one r (A1) able (A2) b) B1) posits (B2)		Water-Sta MLRA 1, Salt Crus Aquatic Ir Hydrogen Oxidized Roots (C3	ained Leaves 2, 4A, and 4 t (B11) evertebrates Sulfide Odo Rhizosphere B)	B) (B13) r (C1) s along Living	4 D D	Vater-Stained Leaves (A, and 4B) Orainage Patterns (B10 Ory-Season Water Tab Saturation Visible on Ac Geomorphic Position (I	(B9) (MLRA 1, 2, 0) le (C2) erial Imagery (C9)
POROLOGY Vetland Hydrologimary Indicators Surface Water High Water Ta Saturation (A3 Water Marks (ogy Indicators: s (minimum of one r (A1) able (A2) b) B1) posits (B2)		Water-Sta MLRA 1, Salt Crus Aquatic Ir Hydrogen Oxidized Roots (C3 Presence	ained Leaves 2, 4A, and 4 t (B11) evertebrates Sulfide Odo Rhizosphere 3) of Reduced	B) (B13) r (C1) s along Living Iron (C4)	4 D D	Vater-Stained Leaves (A, and 4B) Orainage Patterns (B10 Ory-Season Water Tab Saturation Visible on A	(B9) (MLRA 1, 2, 0) le (C2) erial Imagery (C9)
POROLOGY Vetland Hydrologimary Indicators Surface Water High Water Ta Saturation (A3 Water Marks (Sediment Dep Drift Deposits	ogy Indicators: s (minimum of one r (A1) able (A2) B1) oosits (B2) (B3)		Water-Sta MLRA 1, Salt Crus Aquatic Ir Hydrogen Oxidized Roots (C3 Presence Recent Ire	ained Leaves 2, 4A, and 4 t (B11) evertebrates Sulfide Odo Rhizosphere B) of Reduced on Reduction	B) (B13) r (C1) s along Living Iron (C4)	V 4	Vater-Stained Leaves (A, and 4B) Orainage Patterns (B10 Ory-Season Water Tab Saturation Visible on Ac Geomorphic Position (D Shallow Aquitard (D3)	(B9) (MLRA 1, 2, 0) le (C2) erial Imagery (C9)
PROLOGY Vetland Hydrologimary Indicators Surface Water High Water Ta Saturation (A3 Water Marks (Sediment Dep	ogy Indicators: s (minimum of one r (A1) able (A2) B1) oosits (B2) (B3)		Water-Sta MLRA 1, Salt Crus Aquatic Ir Hydrogen Oxidized Roots (C3 Presence Recent Ir Soils (C6)	ained Leaves 2, 4A, and 4 t (B11) evertebrates Sulfide Odo Rhizosphere B) of Reduced on Reduction	(B13) r (C1) s along Living Iron (C4) in Tilled	V 4	Vater-Stained Leaves (A, and 4B) Orainage Patterns (B10 Ory-Season Water Tab Saturation Visible on Ac Geomorphic Position (I	(B9) (MLRA 1, 2, 0) le (C2) erial Imagery (C9)
TOROLOGY Tetland Hydrologimary Indicators Surface Water High Water Ta Saturation (A3 Water Marks (Sediment Dep Drift Deposits Algal Mat or C Iron Deposits	ogy Indicators: s (minimum of one r (A1) able (A2) B1) posits (B2) (B3) crust (B4)		Water-Sta MLRA 1, Salt Crus Aquatic Ir Hydrogen Oxidized Roots (CG Presence Recent Ir Soils (C6) Stunted o	ained Leaves 2, 4A, and 4 t (B11) overtebrates Sulfide Odo Rhizosphere 3) of Reduced on Reduction r Stressed P	(B13) r (C1) s along Living lron (C4) in Tilled lants (D1)	V 4 5 5 F	Vater-Stained Leaves (A, and 4B) Drainage Patterns (B10 Dry-Season Water Tab Saturation Visible on Ac Geomorphic Position (E Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6)	(B9) (MLRA 1, 2, 0) le (C2) erial Imagery (C9) 02)
POROLOGY Fetland Hydrologimary Indicators Surface Water High Water Ta Saturation (A3 Water Marks (Sediment Dep Drift Deposits Algal Mat or C Iron Deposits Surface Soil C Inundation Vis	ogy Indicators: s (minimum of one r (A1) able (A2) B1) posits (B2) (B3) crust (B4)	e required; ch	Water-Sta MLRA 1, Salt Crus Aquatic Ir Hydrogen Oxidized Roots (CG Presence Recent Ir Soils (C6) Stunted o	ained Leaves 2, 4A, and 4 t (B11) evertebrates Sulfide Odo Rhizosphere B) of Reduced on Reduction	(B13) r (C1) s along Living lron (C4) in Tilled lants (D1)	V 4 5 5 F	Vater-Stained Leaves (A, and 4B) Orainage Patterns (B10 Ory-Season Water Tab Saturation Visible on Ac Geomorphic Position (D Shallow Aquitard (D3) FAC-Neutral Test (D5)	(B9) (MLRA 1, 2, 0) le (C2) erial Imagery (C9) 02)
POROLOGY Vetland Hydrology Vetland Hydrology Surface Water High Water Ta Saturation (A3) Water Marks (Sediment Dep Drift Deposits Algal Mat or Co Iron Deposits Surface Soil Co Inundation Vis Sparsely Vege	ogy Indicators: s (minimum of one r (A1) able (A2) B1) posits (B2) (B3) crust (B4) (B5) cracks (B6) sible on Aerial Imagetated Concave S	e required; ch	Water-Sta MLRA 1, Salt Crus Aquatic Ir Hydrogen Oxidized Roots (C3 Presence Recent Ir Soils (C6) Stunted o	ained Leaves 2, 4A, and 4 t (B11) overtebrates Sulfide Odo Rhizosphere 3) of Reduced on Reduction r Stressed P	(B13) r (C1) s along Living lron (C4) in Tilled lants (D1)	V 4 5 5 F	Vater-Stained Leaves (A, and 4B) Drainage Patterns (B10 Dry-Season Water Tab Saturation Visible on Ac Geomorphic Position (E Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6)	(B9) (MLRA 1, 2, 0) le (C2) erial Imagery (C9) 02)
PROLOGY Petland Hydrology Petland Hydrology Surface Water High Water Ta Saturation (A3) Water Marks (Sediment Dep Drift Deposits Algal Mat or Co Iron Deposits Surface Soil Co Inundation Vis Sparsely Vege petlad Observation Inface Water Property Inface Water Propert	ogy Indicators: s (minimum of one r (A1) able (A2) B1) posits (B2) (B3) crust (B4) cracks (B6) bible on Aerial Imaletated Concave S ons: esent? Yes	e required; ch	Water-Sta MLRA 1, Salt Crus Aquatic Ir Hydrogen Oxidized Roots (C3 Presence Recent Ir Soils (C6) Stunted o (LRR A) Other (Ex	ained Leaves 2, 4A, and 4 t (B11) nvertebrates Sulfide Odo Rhizosphere 3) of Reduced on Reduction r Stressed P plain in Rem es):	B) (B13) r (C1) s along Living Iron (C4) in Tilled lants (D1) arks)	V 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Vater-Stained Leaves (A, and 4B) Drainage Patterns (B10 Dry-Season Water Tab Saturation Visible on Ad Geomorphic Position (D Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6 Frost-Heave Hummock	(B9) (MLRA 1, 2, 0) le (C2) erial Imagery (C9) 02) 6) (LRR A) s (D7)
PROLOGY Vetland Hydrology Vetland Hydrology Vetland Hydrology Surface Water High Water Ta Saturation (A3) Water Marks (Sediment Dep Drift Deposits Algal Mat or Co Iron Deposits Surface Soil Co Inundation Vis Sparsely Vege Vetel Observation Vater Table Presidents	ogy Indicators: s (minimum of one r (A1) able (A2) B1) posits (B2) (B3) crust (B4) (B5) cracks (B6) bible on Aerial Imagetated Concave S ons: esent? Yes ent? Yes	e required; ch	Water-Sta MLRA 1, Salt Crus Aquatic Ir Hydrogen Oxidized Roots (CG Presence Recent Ir Soils (C6) Stunted o (LRR A) Other (Ex	ained Leaves 2, 4A, and 4 t (B11) nvertebrates Sulfide Odo Rhizosphere 3) of Reduced on Reduction r Stressed P plain in Rem es):	B) (B13) r (C1) s along Living Iron (C4) in Tilled lants (D1) arks)	V 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Vater-Stained Leaves (A, and 4B) Drainage Patterns (B10 Dry-Season Water Tab Saturation Visible on Ar Geomorphic Position (D Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6 Frost-Heave Hummock	(B9) (MLRA 1, 2, 0) le (C2) erial Imagery (C9) 02)
PROLOGY Vetland Hydrology Vetland Hydrology Surface Water High Water Ta Saturation (A3 Water Marks (Sediment Dep Drift Deposits Algal Mat or Co Iron Deposits Surface Soil Co Inundation Vis Sparsely Vege ield Observation	ogy Indicators: s (minimum of one r (A1) able (A2) B1) rosits (B2) (B3) crust (B4) (B5) cracks (B6) sible on Aerial Imagetated Concave S ons: esent? Yes ent? Yes ent?	e required; ch	Water-Sta MLRA 1, Salt Crus Aquatic Ir Hydrogen Oxidized Roots (C3 Presence Recent Ir Soils (C6) Stunted o (LRR A) Other (Ex	ained Leaves 2, 4A, and 4 t (B11) nvertebrates Sulfide Odo Rhizosphere 3) of Reduced on Reduction r Stressed P plain in Rem es):	B) (B13) r (C1) s along Living Iron (C4) in Tilled lants (D1) arks)	V 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Vater-Stained Leaves (A, and 4B) Drainage Patterns (B10 Dry-Season Water Tab Saturation Visible on Ad Geomorphic Position (D Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6 Frost-Heave Hummock	(B9) (MLRA 1, 2, 0) le (C2) erial Imagery (C9) 02) 6) (LRR A) s (D7)
POROLOGY Vetland Hydrology Vetland Hydrology Vetland Hydrology Surface Water High Water Ta Saturation (A3) Water Marks (Sediment Dep Drift Deposits Algal Mat or Co Iron Deposits Surface Soil Co Inundation Vis Sparsely Vege Vetlater Table Presently Saturation Presently	ogy Indicators: s (minimum of one r (A1) able (A2) B1) rosits (B2) (B3) crust (B4) (B5) cracks (B6) sible on Aerial Imagetated Concave S ons: esent? Yes ent? Yes ent?	e required; che	Water-Sta MLRA 1, Salt Crus Aquatic Ir Hydrogen Oxidized Roots (C3 Presence Recent Ir Soils (C6) Stunted o (LRR A) Other (Ex	ained Leaves 2, 4A, and 4 t (B11) nvertebrates Sulfide Odo Rhizosphere 3) of Reduced on Reduction r Stressed P plain in Rem es): es):	B) (B13) r (C1) s along Living Iron (C4) in Tilled lants (D1) arks) Wet	V 4 4 5 5 5 5 5 5 6 5 6 6 6 6 6 6 6 6 6 6	Vater-Stained Leaves (A, and 4B) Orainage Patterns (B10 Ory-Season Water Tab Saturation Visible on Ad Geomorphic Position (D Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6 Frost-Heave Hummock	(B9) (MLRA 1, 2, 0) le (C2) erial Imagery (C9) 02) 6) (LRR A) s (D7)
POROLOGY Vetland Hydrology Vetland Hydrology Surface Water High Water Ta Saturation (A3) Water Marks (Sediment Dep Drift Deposits Algal Mat or Co Iron Deposits Surface Soil Co Inundation Vis Sparsely Vege Vetlater Table Presently Saturation Presently Sa	ogy Indicators: s (minimum of one r (A1) able (A2) B1) posits (B2) (B3) crust (B4) (B5) cracks (B6) bible on Aerial Imagetated Concave S posits esent? Yes posits (B2) resent? Yes posits (B3) resent? Yes posits (B4) resent? Yes posits (B4) resent? Yes posits (B4)	e required; che	Water-Sta MLRA 1, Salt Crus Aquatic Ir Hydrogen Oxidized Roots (C3 Presence Recent Ir Soils (C6) Stunted o (LRR A) Other (Ex	ained Leaves 2, 4A, and 4 t (B11) nvertebrates Sulfide Odo Rhizosphere 3) of Reduced on Reduction r Stressed P plain in Rem es): es):	B) (B13) r (C1) s along Living Iron (C4) in Tilled lants (D1) arks) Wet	V 4 4 5 5 5 5 5 5 6 5 6 6 6 6 6 6 6 6 6 6	Vater-Stained Leaves (A, and 4B) Orainage Patterns (B10 Ory-Season Water Tab Saturation Visible on Ad Geomorphic Position (D Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6 Frost-Heave Hummock	(B9) (MLRA 1, 2, 0) le (C2) erial Imagery (C9) 02) 6) (LRR A) s (D7)

Applicant/Owner: Investigator(s): Landform (hillslope, terrace, etc.): Subregion (LRR): A La	at: 45.42085 Long:-122.42	Point:
Soil Map Unit Name:		VI classification:
Are climatic / hydrologic conditions on the site typical	al for this time of year? Yes 🥻 No _	(If no, explain in Remarks.)
Are Vegetation X , Soil X , or Hydrology	significantly disturbed? Are "No	rmal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology		f needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site	map showing sampling point lo	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes N Hydric Soil Present? Yes N Wetland Hydrology Present? Yes N	o Is the Sampled Area with	
Remarks:		
VEGETATION – Use scientific names o	f plants.	
	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30' d.	% Cover Species? Status	Number of Dominant Species
1		That Are OBL, FACW, or FAC: (A)
2.		Total Number of Dominant Species Across All Strata: (B)
3		
4.		Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
,	= Total Cover	
Sapling/Shrub Stratum (Plot size: 20' d.)		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 =
	= Total Cover	UPL species x 5 =
Herb Stratum (Plot size: 10' d.)		
1.		Column Totals: (A) (B)
2.		Prevalence Index = B/A =
3.		
4		Hydrophytic Vegetation Indicators:
5.		1 - Rapid Test for Hydrophytic Vegetation
6.		2 - Dominance Test is >50%
7.		3 - Prevalence Index is ≤3.01
8.		4 - Morphological Adaptations¹ (Provide supporting
0		data in Remarks or on a separate sheet)
10.		5 - Wetland Non-Vascular Plants ¹
11.		Problematic Hydrophytic Vegetation ¹ (Explain)
11.	= Total Cover	¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size:)	= Total cover	be present, unless disturbed or problematic.
1		
•	· ·	
2	= Total Cover	Hydrophytic
% Bare Ground in Herb Stratum		Vegetation Present? Yes No
70 Date Glound in Helb Stratum	-0.0 01.5 %	110301111 103
		, k
Remarks: Tilled - based on	soils thy dialogy	-> previous sile data

SOIL					Sampling Poir	nt: DY-14
Profile Description: (Describe to the depth	needed to docume	ent the indica	tor or con	firm the a	bsence of indicators	.)
Depth Matrix	F	Redox Feature	S			
(inches) Color (moist) %	Color (moist)	%	Гуре¹	Loc ²	Texture	Remarks
N-1 648 H/ 100					C1/0	
V 6 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					460	
6=17 5XK4/11 1000					0160	
IT IS WERN'T LOS					()	
16-16 516-1/1 100					21 60	
¹ Type: C=Concentration, D=Depletion, RM=F	Reduced Matrix, CS=	Covered or C	oated Sand	Grains.	² Location: PL=Pore	Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all I	DDs unless other	wice noted)		Ind	icatora for Problems	tio Undria Caila3.
Hydric Soil indicators: (Applicable to all I	rks, unless other	wise noted.)		ma	icators for Problema	ic Hydric Solls":
Histosol (A1)	Sandy Redox (S5)			2 cm Muck (A10)	
Histic Epipedon (A2)	Stripped Matrix (S				Red Parent Material (ΓF2)
Black Histic (A3)	Loamy Mucky Mir		ept MLRA		Very Shallow Dark Su	
Hydrogen Sulfide (A4)	Loamy Gleyed Ma				Other (Explain in Rem	
Depleted Below Dark Surface (A11)	Depleted Matrix (F			_	Caron (Explain in 1701)	
Thick Dark Surface (A12)	Redox Dark Surfa				31maliantous of budgeth	
Sandy Mucky Mineral (S1)	Depleted Dark Su				3Indicators of hydroph	
					wetland hydrology mu	st be present,
Sandy Gleyed Matrix (S4)	Redox Depression	ns (F8)			unless disturbed or pr	oblematic
Restrictive Layer (if present):						1.0
Type:		H	ydric Soil	Present?	Yes	No X
Depth (inches):						
HYDROLOGY						
Wetland Hydrology Indicators:						
Primary Indicators (minimum of one required; cl	neck all that apply)			Seco	ndary Indicators (2 or r	more required)
	Water-Stained	Leaves (R9)	excent		later-Stained Leaves (
Surface Water (A1)	MLRA 1, 2, 4A		except		A, and 4B)	D3) (WILKA 1, 2,
High Water Table (A2)	Salt Crust (B1				rainage Patterns (B10)	
Saturation (A3)						
Water Marks (B1)	Aquatic Invert			_ 0	ry-Season Water Table	e (C2)
Water Warks (B1)	Hydrogen Sulf	ide Odor (C1)		S	aturation Visible on Ae	rial Imagery (C9)
0 1 10 1 10	Oxidized Rhize	ospheres alon	g Living			
Sediment Deposits (B2)	Roots (C3)				eomorphic Position (D	2)
Drift Deposits (B3)	Presence of R	educed Iron (24)	S	hallow Aquitard (D3)	
	Recent Iron Re	eduction in Til	ed			
Algal Mat or Crust (B4)	Soils (C6)			F	AC-Neutral Test (D5)	
	Stunted or Str	essed Plants	D1)			
Iron Deposits (B5)	(LRR A)			R	aised Ant Mounds (D6	(LRR A)
Surface Soil Cracks (B6)	Other (Explain	in Remarks)			rost-Heave Hummocks	
Inundation Visible on Aerial Imagery (B7)				'		,
Sparsely Vegetated Concave Surface (B8)						
(D0)						
Field Observations:						
	D					
Surface Water Present? Yes No	_ Depth (inches):					X.
Water Table Present? Yes No	Depth (inches):		Wetla	nd Hydro	logy Present? Ye	s No X
Saturation Present?		100 11			Action Services	
(includes capillary fringe) Yes No	Depth (inches):	160 11				
Describe Recorded Data (stream gauge, monitori	ng well, aerial photo	s, previous ins	spections)	if available	e:	
(o, sonal prioto	., p. 571600 1116	p-00000),	cranabl		
Remarks:						

Applicant/Owner: Investigator(s): Landform (hillslope, terrace, etc.): Subregion (LRR): A La Soil Map Unit Name: Are climatic / hydrologic conditions on the site typica Are Vegetation	If for this time of year? Yes No significantly disturbed? Are "No naturally problematic? (Imap showing sampling point let it it is the Sampled Area with	Point: One): Datum: WGS84 WI classification: (If no, explain in Remarks.) ormal Circumstances" present? Yes No If needed, explain any answers in Remarks.) ocations, transects, important features, etc.
150x-1595		
VEGETATION - Use scientific names of	f plants.	
Tree Stratum (Plot size: 30' d.) 1.	Absolute Dominant Indicator <u>% Cover Species? Status</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2. 3.		Total Number of Dominant Species Across All Strata: (B)
4.		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
/	= Total Cover	
Sapling/Shrub Stratum (Plot size: 20' d.)		Prevalence Index worksheet:
1.	-	Total % Cover of: Multiply by:
2.		OBL species x 1 =
3.	-	FAC encoins x 2 =
5		FAC species x 3 = FACU species x 4 =
1	= Total Cover	FACU species
Herb Stratum (Plot size: 10' d.)		Column Totals: (A) (B)
2.		Prevalence Index = B/A =
3.		the december 4 is Versahadi an India akana
4		Hydrophytic Vegetation Indicators:
5.	-	1 - Rapid Test for Hydrophytic Vegetation
7.		2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹
8.		4 - Morphological Adaptations ¹ (Provide supporting
9.		data in Remarks or on a separate sheet)
10.		5 - Wetland Non-Vascular Plants1
11.		Problematic Hydrophytic Vegetation ¹ (Explain)
Woody Vine Stratum (Plot size:)	= Total Cover	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1		
% Bare Ground in Herb Stratum	= Total Cover	Hydrophytic Vegetation Present? Yes NoX
Remarks: Tilled-based	on soils + hydrolo	gy-Drevious data

Depth	Matrix			Redox Fea	tures		bsence of indicators	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-6	578.41	100					C) LA	
1 12	TV Bill				-		41 -11	
0-16	34RUM	100					SICILO	
17-18	5XRUL1	100					65 12	
10 211	NVOU!	1.				-	3010	
10-04	J1K-1/3	100					2160	
	1/							
			-					
		_						
								-
Type: C=Cor	ncentration, D=Dep	letion, RM=F	Reduced Matrix, C	S=Covered of	or Coated San	d Grains.	² Location: PL=Pore	e Lining, M=Matrix
Hydric Soil I	ndicators: (Applic	achie te all i	DDs unless oth		-1.			
		cable to all t			a.)	Indi	cators for Problema	tic Hydric Soils ³ :
Histosol (_	_ Sandy Redox (S				2 cm Muck (A10)	
	ipedon (A2)		_ Stripped Matrix				Red Parent Material (TF2)
Black His		_	Loamy Mucky N		except MLRA		Very Shallow Dark Su	
	n Sulfide (A4) Below Dark Surfac	0 (111)	Loamy Gleyed I				Other (Explain in Rem	narks)
Thick Day	rk Surface (A12)	(A11)	Depleted Matrix Redox Dark Sur				2	
	ucky Mineral (S1)	_	Depleted Dark Su				3Indicators of hydroph	ytic vegetation and
	leyed Matrix (S4)	-	Redox Depress				wetland hydrology mu	ist be present,
ound) of	of out matrix (O+)		Tredox Depress	10113 (1 0)	1		unless disturbed or pr	oblematic
estrictive Lav	er (if present):							
Type:					Undeia Cail	Dunnanto	V	W. M
Depth (inche					Hydric Soil	rresent?	Yes	NO NO
Deptil (Illicite	55).							
narks:	gh Chro	ma						
DROLOGY	gh Chro	mg						
DROLOGY etland Hydro	gh Chro		neck all that apply)			Secon	dary Indicators (2 or r	more required)
DROLOGY etland Hydrolimary Indicato	gh Chro		Water-Stain	ed Leaves (E	39) (except		idary Indicators (2 or rater-Stained Leaves (
DROLOGY etland Hydrolimary Indicato	gh Chro logy Indicators: ors (minimum of one er (A1)		neck all that apply) Water-Stain MLRA 1, 2,	ed Leaves (E	39) (except	Wa	idary Indicators (2 or rater-Stained Leaves (i	
DROLOGY etland Hydrol imary Indicato Surface Wate High Water T	logy Indicators: ors (minimum of one er (A1) Table (A2)		Water-Stain	ed Leaves (E 4A, and 4B)	39) (except	Wa 4A	ater-Stained Leaves (I	B9) (MLRA 1, 2,
DROLOGY etland Hydrol imary Indicato Surface Wate High Water T Saturation (A	logy Indicators: ors (minimum of one er (A1) Table (A2)		Water-Staine MLRA 1, 2, Salt Crust (E Aquatic Inve	ed Leaves (E 4A, and 4B) 311) ertebrates (B	13)	4A Dra	ater-Stained Leaves (B9) (MLRA 1, 2,
DROLOGY etland Hydrol imary Indicato Surface Wate High Water T	logy Indicators: ors (minimum of one er (A1) Table (A2)		Water-Staine MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen Si	ed Leaves (E 4A, and 4B) 311) ertebrates (B ulfide Odor (13) C1)	4A Dra	ater-Stained Leaves (i a, and 4B) ainage Patterns (B10)	B9) (MLRA 1, 2,) e (C2)
DROLOGY etland Hydrol imary Indicato Surface Wate High Water T Saturation (A Water Marks	logy Indicators: ors (minimum of one er (A1) Table (A2) (B1)		Water-Stain MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh	ed Leaves (E 4A, and 4B) 311) ertebrates (B ulfide Odor (13) C1)	Wa 4A Dra Dra Sa	ater-Stained Leaves (i a, and 4B) ainage Patterns (B10) y-Season Water Table aturation Visible on Ae	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9)
DROLOGY etland Hydrol imary Indicato Surface Wate High Water T Saturation (A Water Marks Sediment De	logy Indicators: ors (minimum of one er (A1) Table (A2) (B1) (B1)		Water-Stain MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Roots (C3)	ed Leaves (B 4A, and 4B) 311) ertebrates (B ulfide Odor (izospheres a	13) C1) along Living	Wa 4A Dra Dra Sa Ge	ater-Stained Leaves (i a, and 4B) ainage Patterns (B10) y-Season Water Table aturation Visible on Ae	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9)
DROLOGY etland Hydrol imary Indicato Surface Wate High Water T Saturation (A Water Marks	logy Indicators: ors (minimum of one er (A1) Table (A2) (B1) (B1)		Water-Stain MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Roots (C3) Presence of	ed Leaves (B 4A, and 4B) 311) ertebrates (B ulfide Odor (izospheres a Reduced Iro	13) C1) along Living on (C4)	Wa 4A Dra Dra Sa Ge	ater-Stained Leaves (i a, and 4B) ainage Patterns (B10) y-Season Water Table aturation Visible on Ae	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9)
DROLOGY etland Hydrol imary Indicato Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits	logy Indicators: ors (minimum of one er (A1) Table (A2) (B1) eposits (B2) s (B3)		Water-Stain MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Roots (C3) Presence of Recent Iron	ed Leaves (B 4A, and 4B) 311) ertebrates (B ulfide Odor (izospheres a Reduced Iro	13) C1) along Living on (C4)	Wa 4A Dra Dra Sa Sa Sh	ater-Stained Leaves (i. and 4B) ainage Patterns (B10) y-Season Water Table attration Visible on Ae eomorphic Position (Diallow Aquitard (D3)	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9)
DROLOGY etland Hydrol mary Indicato Surface Wate High Water T Saturation (A Water Marks Sediment De	logy Indicators: ors (minimum of one er (A1) Table (A2) (B1) eposits (B2) s (B3)		Water-Stain MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6)	ed Leaves (B 4A, and 4B) 311) ertebrates (B ulfide Odor (izospheres a Reduced Iro Reduction in	13) C1) along Living on (C4) Tilled	Wa 4A Dra Dra Sa Sa Sh	ater-Stained Leaves (i a, and 4B) ainage Patterns (B10) y-Season Water Table aturation Visible on Ae	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9)
DROLOGY etland Hydrol imary Indicato Surface Water High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or 0	logy Indicators: ors (minimum of one er (A1) Table (A2) (B1) oposits (B2) s (B3) Crust (B4)		Water-Stain MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S	ed Leaves (B 4A, and 4B) 311) ertebrates (B ulfide Odor (izospheres a Reduced Iro Reduction in	13) C1) along Living on (C4) Tilled	Wa 4A Dra Dra Sa Ge Sh	ater-Stained Leaves (i. a, and 4B) ainage Patterns (B10) y-Season Water Table attration Visible on Ae eomorphic Position (Diallow Aquitard (D3)	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9) 2)
DROLOGY etland Hydrol imary Indicato Surface Water High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or 0 Iron Deposits	logy Indicators: res (minimum of one er (A1) Table (A2) 3) (B1) posits (B2) s (B3) Crust (B4)		Water-Staine MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A)	ed Leaves (E 4A, and 4B) 311) ertebrates (B ulfide Odor (izospheres a Reduced Iro Reduction in	13) C1) along Living on (C4) Tilled	Wa 4A Dra Dra Sa	ater-Stained Leaves (i. and 4B) ainage Patterns (B10) y-Season Water Table aturation Visible on Ae eomorphic Position (Di allow Aquitard (D3) aC-Neutral Test (D5) aised Ant Mounds (D6)	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9) 2)
DROLOGY etland Hydrol imary Indicato Surface Water High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (I Iron Deposits Surface Soil	logy Indicators: ors (minimum of one er (A1) Table (A2) (B1) oposits (B2) s (B3) Crust (B4) s (B5) Cracks (B6)	e required; ch	Water-Stain MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S	ed Leaves (E 4A, and 4B) 311) ertebrates (B ulfide Odor (izospheres a Reduced Iro Reduction in	13) C1) along Living on (C4) Tilled	Wa 4A Dra Dra Sa	ater-Stained Leaves (i. a, and 4B) ainage Patterns (B10) y-Season Water Table attration Visible on Ae eomorphic Position (Diallow Aquitard (D3)	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9) 2)
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DROLOGY etland Hydrol imary Indicato Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (I Iron Deposits Surface Soil (I Inundation Vi	logy Indicators: ors (minimum of one er (A1) Table (A2) (B1) posits (B2) s (B3) Crust (B4) (B5) Cracks (B6) isible on Aerial Image	e required; ch	Water-Staine MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A)	ed Leaves (E 4A, and 4B) 311) ertebrates (B ulfide Odor (izospheres a Reduced Iro Reduction in	13) C1) along Living on (C4) Tilled	Wa 4A Dra Dra Sa	ater-Stained Leaves (i. and 4B) ainage Patterns (B10) y-Season Water Table aturation Visible on Ae eomorphic Position (Di allow Aquitard (D3) aC-Neutral Test (D5) aised Ant Mounds (D6)	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9) 2)
DROLOGY etland Hydrol imary Indicato Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (I Iron Deposits Surface Soil (I Inundation Vi Sparsely Veg	logy Indicators: ors (minimum of one er (A1) Table (A2) (B1) Posits (B2) (B3) Crust (B4) (B5) Cracks (B6) (sible on Aerial Image petated Concave Su ons:	e required; ch	Water-Staine MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A)	ed Leaves (E 4A, and 4B) 311) ertebrates (B ulfide Odor (izospheres a Reduced Iro Reduction in	13) C1) along Living on (C4) Tilled	Wa 4A Dra Dra Sa	ater-Stained Leaves (i. and 4B) ainage Patterns (B10) y-Season Water Table aturation Visible on Ae eomorphic Position (Di allow Aquitard (D3) aC-Neutral Test (D5) aised Ant Mounds (D6)	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9) 2)
DROLOGY etland Hydrol imary Indicato Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (I Iron Deposits Surface Soil (I Inundation Vi Sparsely Veg eld Observation rface Water P	logy Indicators: ors (minimum of one er (A1) Table (A2) (B1) Posits (B2) (B3) Crust (B4) (B5) Cracks (B6) disible on Aerial Imaginetated Concave Surveyors: ons: ons:	e required; ch	Water-Staine MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A)	ed Leaves (E 4A, and 4B) 311) ertebrates (B ulfide Odor (izospheres a Reduced Iro Reduction in stressed Plan ain in Remark	13) C1) along Living on (C4) Tilled	Wa 4A Dra Dra Sa	ater-Stained Leaves (i. and 4B) ainage Patterns (B10) y-Season Water Table aturation Visible on Ae eomorphic Position (Di allow Aquitard (D3) aC-Neutral Test (D5) aised Ant Mounds (D6)	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9) 2)
DROLOGY etland Hydrol imary Indicato Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or 0 Iron Deposits Surface Soil Inundation Vi Sparsely Veg eld Observation Irace Water Pater Table Pre-	logy Indicators: ors (minimum of one er (A1) Table (A2) (B1) Posits (B2) (B3) Crust (B4) (GB5) Cracks (B6) (Sible on Aerial Image etated Concave Su petated Concave Su cons: cresent? Yes sent? Yes	gery (B7) urface (B8)	Water-Staine MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A) Other (Explain	ed Leaves (B 4A, and 4B) 311) ertebrates (B ulfide Odor (izospheres a Reduced Iro Reduction in stressed Plan ain in Remark	13) C1) along Living on (C4) Tilled ats (D1)	Wa 4A Dra Dra Sa Ge Sh FA Ra Fro	ater-Stained Leaves (I A, and 4B) ainage Patterns (B10) y-Season Water Table atturation Visible on Ae ecomorphic Position (D. allow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) ost-Heave Hummocks	B9) (MLRA 1, 2,) e (C2) vial Imagery (C9) 2)) (LRR A) 5 (D7)
DROLOGY etland Hydrol imary Indicato Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (I Iron Deposits Surface Soil (I Inundation Vi Sparsely Veg eld Observation face Water P ater Table Pre- turation Prese	logy Indicators: ors (minimum of one er (A1) Table (A2) 3) (B1) posits (B2) s (B3) Crust (B4) s (B5) Cracks (B6) sible on Aerial Imagetated Concave Surpersons: resent? Yes ent?	gery (B7) urface (B8)	Water-Staine MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A) Other (Expla	ed Leaves (E 4A, and 4B) 311) ertebrates (B ulfide Odor (izospheres a Reduced Iro Reduction in stressed Plan ain in Remark	13) C1) along Living on (C4) Tilled ats (D1) (S) Wetla	Wa 4A Dra Dra Sa Ge Sh FA Ra Fro	ater-Stained Leaves (i. a, and 4B) ainage Patterns (B10) y-Season Water Table atturation Visible on Ae comorphic Position (D. allow Aquitard (D3) aC-Neutral Test (D5) aised Ant Mounds (D6) ast-Heave Hummocks	B9) (MLRA 1, 2,) e (C2) vial Imagery (C9) 2)) (LRR A) 5 (D7)
DROLOGY etland Hydrol imary Indicato Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (I Iron Deposits Surface Soil I Inundation Vi Sparsely Veg eld Observation frace Water P ater Table Pre- turation Presecutes capillar	logy Indicators: ors (minimum of one er (A1) Table (A2) 3) (B1) posits (B2) s (B3) Crust (B4) s (B5) Cracks (B6) sible on Aerial Imagetated Concave Survey ons: resent? Yes sent? Yes ent? ry fringe) Yes	gery (B7) urface (B8) No No	Water-Staine MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A) Other (Expla	ed Leaves (E 4A, and 4B) 311) ertebrates (B ulfide Odor (izospheres a Reduced Iro Reduction in stressed Plan ain in Remark	13) C1) along Living on (C4) Tilled ats (D1) (s) Wetla	Wa 4A Dra Dra Sa Sh Sh Ra Fro	ater-Stained Leaves (i. a, and 4B) ainage Patterns (B10) y-Season Water Table aturation Visible on Ae emorphic Position (D. allow Aquitard (D3) aC-Neutral Test (D5) aised Ant Mounds (D6) ast-Heave Hummocks	B9) (MLRA 1, 2,) e (C2) vial Imagery (C9) 2)) (LRR A) 5 (D7)
DROLOGY etland Hydrol imary Indicato Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (I Iron Deposits Surface Soil (I Inundation Vi Sparsely Veg etd Observation face Water P ater Table Pre- turation Presecutes capillar	logy Indicators: ors (minimum of one er (A1) Table (A2) 3) (B1) posits (B2) s (B3) Crust (B4) s (B5) Cracks (B6) sible on Aerial Imagetated Concave Surpersons: resent? Yes ent?	gery (B7) urface (B8) No No	Water-Staine MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A) Other (Expla	ed Leaves (E 4A, and 4B) 311) ertebrates (B ulfide Odor (izospheres a Reduced Iro Reduction in stressed Plan ain in Remark	13) C1) along Living on (C4) Tilled ats (D1) (s) Wetla	Wa 4A Dra Dra Sa Sh Sh Ra Fro	ater-Stained Leaves (i. a, and 4B) ainage Patterns (B10) y-Season Water Table aturation Visible on Ae emorphic Position (D. allow Aquitard (D3) aC-Neutral Test (D5) aised Ant Mounds (D6) ast-Heave Hummocks	B9) (MLRA 1, 2,) e (C2) vial Imagery (C9) 2)) (LRR A) 5 (D7)
DROLOGY etland Hydrol imary Indicato Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (I Iron Deposits Surface Soil (I Inundation Vi Sparsely Veg etd Observation face Water P ater Table Pre- turation Presecutes capillar	logy Indicators: ors (minimum of one er (A1) Table (A2) 3) (B1) posits (B2) s (B3) Crust (B4) s (B5) Cracks (B6) sible on Aerial Imagetated Concave Survey ons: resent? Yes sent? Yes ent? ry fringe) Yes	gery (B7) urface (B8) No No	Water-Staine MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A) Other (Expla	ed Leaves (E 4A, and 4B) 311) ertebrates (B ulfide Odor (izospheres a Reduced Iro Reduction in stressed Plan ain in Remark	13) C1) along Living on (C4) Tilled ats (D1) (s) Wetla	Wa 4A Dra Dra Sa Sh Sh Ra Fro	ater-Stained Leaves (i. a, and 4B) ainage Patterns (B10) y-Season Water Table aturation Visible on Ae emorphic Position (D. allow Aquitard (D3) aC-Neutral Test (D5) aised Ant Mounds (D6) ast-Heave Hummocks	B9) (MLRA 1, 2,) e (C2) vial Imagery (C9) 2)) (LRR A) 5 (D7)
DROLOGY etland Hydrol imary Indicato Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (I Iron Deposits Surface Soil (I Inundation Vi Sparsely Veg eld Observation rface Water P ater Table Pre- turation Prese cludes capillar cribe Recorde	logy Indicators: ors (minimum of one er (A1) Table (A2) 3) (B1) posits (B2) s (B3) Crust (B4) s (B5) Cracks (B6) sible on Aerial Imagetated Concave Survey ons: resent? Yes sent? Yes ent? ry fringe) Yes	gery (B7) urface (B8) No No	Water-Staine MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A) Other (Expla	ed Leaves (E 4A, and 4B) 311) ertebrates (B ulfide Odor (izospheres a Reduced Iro Reduction in stressed Plan ain in Remark	13) C1) along Living on (C4) Tilled ats (D1) (s) Wetla	Wa 4A Dra Dra Sa Sh Sh Ra Fro	ater-Stained Leaves (i. a, and 4B) ainage Patterns (B10) y-Season Water Table aturation Visible on Ae emorphic Position (D. allow Aquitard (D3) aC-Neutral Test (D5) aised Ant Mounds (D6) ast-Heave Hummocks	B9) (MLRA 1, 2,) e (C2) vial Imagery (C9) 2)) (LRR A) 5 (D7)
DROLOGY etland Hydrol imary Indicato Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (I Iron Deposits Surface Soil (I Inundation Vi Sparsely Veg etld Observation face Water P ater Table Pre- turation Presecutives capillar	logy Indicators: ors (minimum of one er (A1) Table (A2) 3) (B1) posits (B2) s (B3) Crust (B4) s (B5) Cracks (B6) sible on Aerial Imagetated Concave Survey ons: resent? Yes sent? Yes ent? ry fringe) Yes	gery (B7) urface (B8) No No	Water-Staine MLRA 1, 2, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Roots (C3) Presence of Recent Iron Soils (C6) Stunted or S (LRR A) Other (Expla	ed Leaves (E 4A, and 4B) 311) ertebrates (B ulfide Odor (izospheres a Reduced Iro Reduction in stressed Plan ain in Remark	13) C1) along Living on (C4) Tilled ats (D1) (s) Wetla	Wa 4A Dra Dra Sa Sh Sh Ra Fro	ater-Stained Leaves (i. a, and 4B) ainage Patterns (B10) y-Season Water Table aturation Visible on Ae emorphic Position (D. allow Aquitard (D3) aC-Neutral Test (D5) aised Ant Mounds (D6) ast-Heave Hummocks	B9) (MLRA 1, 2,) e (C2) vial Imagery (C9) 2)) (LRR A) 5 (D7)

Project/Site: Sester Gramos Ci Applicant/Owner: Sester Forms Investigator(s): Landform (hillslope, terrace, etc.): Subregion (LRR): A La Soil Map Unit Name: Deen G Are climatic / hydrologic conditions on the site typical Are Vegetation Soil or Hydrology Are Vegetation Soil or Hydrology	State: WA Sampling Section, Township, Range: Local relief (concave, convex, nat: 45.42114 Long: 122.44) All for this time of year? Yes No significantly disturbed? Are "No	Point: DP 16 025 035 one): SWale Slope (%): 1 214 7 Datum: WGS84 WI classification:
Hydrophytic Vegetation Present? Yes N Hydric Soil Present? Yes N Wetland Hydrology Present? Yes N	lo Is the Sampled Area with	, see notes .
8. 7	hydric soil remo	iginally conditions
VEGETATION - Use scientific names of	of plants.	
Tree Stratum (Plot size: 30' d.)	Absolute Dominant Indicator <u>% Cover Species? Status</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2. 3.	•	Total Number of Dominant Species Across All Strata: (B)
4.		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
7	= Total Cover	
Sapling/Shrub Stratum (Plot size: 20' d.) 1.		Prevalence Index worksheet: Total % Cover of: Multiply by:
2.	Marie Control of the	OBL species x1=
3.		FACW species x 2 =
5		FAC species x 3 =
·	= Total Cover	FACU species x 4 =
Herb Stratum (Plot size: 10' d.)	1000	UPL species
2.		Prevalence Index = B/A =
4.		Hydrophytic Vegetation Indicators:
5.		1 - Rapid Test for Hydrophytic Vegetation
-		2 - Dominance Test is >50%
7.		3 - Prevalence Index is ≤3.01
		4 - Morphological Adaptations¹ (Provide supporting
9.		data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹
10.		Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size:)	= Total Cover	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1		
% Bare Ground in Herb Stratum	= Total Cover	Hydrophytic Vegetation Present? Yes No
Remarks: non-hydric surf Subsurface soil	ace soil remove appears hidric - we	Jer @ 4" bgs would be hydrophytic

	cription: (Describe Matrix	to the dept	n needed to docu	ment the ir Redox Fe	atures	nnim the a	bsence of indicators.	1
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
10100	7.57R 4/3	20	7.53R5/	2		m	015160	MILL
12/1	7.311 75	00	4.501-04	-6	-			LYILY
	2/2	15+	7/-/	5	41-	-	C13140	
	7 -2							
		-			-			
				-				
-								
ype: C=C	Concentration, D=Dep	oletion, RM=	Reduced Matrix, C	S=Covered	or Coated Sa	nd Grains.	² Location: PL=Pore	Lining, M=Matrix.
dydric Soi	il Indicators: (Appli	cable to all	LRRs. unless oth	erwise not	ed.)	Indi	cators for Problemat	ic Hydric Soils ³ :
		ouble to un	Sandy Redox (2 cm Muck (A10)	
_ Histoso	Epipedon (A2)		Stripped Matrix	,			Red Parent Material (1	F2)
	Histic (A3)	_	Loamy Mucky I		(except MLR		Very Shallow Dark Sur	
	gen Sulfide (A4)		Loamy Gleyed				Other (Explain in Rem	arks)
	ed Below Dark Surfa	ce (A11) _	Depleted Matrix Redox Dark Su				Studiostars of budget	dia vanadalian aas
	Dark Surface (A12) Mucky Mineral (S1)	-	Depleted Dark		7)		³ Indicators of hydrophy wetland hydrology must	
	Gleyed Matrix (S4)	_	Redox Depress		,		unless disturbed or pro	
					T			
strictive L	ayer (if present):						~/	
Type: _					Hydric So	il Present?	Yes X	No
Depth (inc	ches):							
narks:	2	hala	1 surfa	0 0	or DP	20.	19,+17	
-	ormer!	100	0)01	1		(1)	1) 11	
5	rest face	5011	remove	ed				
DROLOG	GY							
	Irology Indicators:							race of the land.
imary Indica	ators (minimum of on	e required;			(B9) (except		ndary Indicators (2 or n	
Surface W	/ater (A1)		MLRA 1, 2				/ater-Stained Leaves (I A, and 4B)	39) (MLRA 1, 2,
	er Table (A2)		Salt Crust (٥,		rainage Patterns (B10)	
Saturation			Aquatic Inv		B13)		ry-Season Water Table	
Water Mai				Sulfide Odor			aturation Visible on Ae	
			Oxidized R	hizospheres	along Living			
	Deposits (B2)		Roots (C3)				eomorphic Position (D	2)
Drift Depo	sits (B3)			f Reduced I		S	hallow Aquitard (D3)	
Algal Mat	or Crust (B4)		Soils (C6)	Reduction	in Tillea	F	AC-Neutral Test (D5)	
rugar mac	0. 0.00. (2-1)		Stunted or	Stressed Pl	ants (D1)	''	to reduce rost (bo)	
Iron Depos	sits (B5)		(LRR A)			R	aised Ant Mounds (D6)	(LRR A)
	oil Cracks (B6)		Other (Expl	ain in Rema	arks)	Fr	rost-Heave Hummocks	(D7)
	Visible on Aerial Ima							
Sparsely V	Vegetated Concave S	Surface (B8)						
ld Observ	rations:							
rface Wate		No	Depth (inches):				
ater Table F		No			We	tland Hydro	logy Present? Ye	s X No
turation Pro		1		11	7 - 1		7.5	-
	illary fringe) Yes	X No	Depth (inches	THE REAL PROPERTY AND ADDRESS OF THE PERSON NAMED IN				
cribe Reco	rded Data (stream ga	auge, monito	ring well, aerial ph	otos, previo	us inspections	s), if available	e:	
arks:	-	1 1	^					
marks:	rmerly	L 12.) suite	7-5				

Dominance Test worksheet: Number of Dominant Species 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: (A/B)
Number of Dominant Species That Are OBL, FACW, or FAC:
Number of Dominant Species That Are OBL, FACW, or FAC:
Number of Dominant Species That Are OBL, FACW, or FAC:
Species Across All Strata: (B) Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
Descriptions Index
Prevalence Index worksheet: Total % Cover of: Multiply by:
OBL species
FACU species x 4 =
UPL species
Prevalence Index = B/A =
Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation
2 - Dominance Test is >50%
3 - Prevalence Index is ≤3.01
4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5 - Wetland Non-Vascular Plants ¹
Problematic Hydrophytic Vegetation¹ (Explain)
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Hydrophytic Vegetation Present? Yes No

Profile Description: (Descri					and the same of th		
Depth			nent the inc Redox Fea		nfirm the a	bsence of indicators.)
(inches) Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-15 -15 Y02:	7 100		Mero.	-1760		61/2	71011101110
75 15 TO 16	12 100			- 63		7/60	
5-20+ 757K4/3	85	75YR 5/2	34	20	+1	C1 5160	
5%	10	800×	-			1/5/20	
	1		-			63160	
	_		-				
					-		
Type: C=Concentration, D=[Depletion, RM=	Reduced Matrix, CS	=Covered	or Coated Sa	nd Grains.	² Location: PL=Pore	Lining, M=Matrix.
Hydric Soil Indicators: (Ap	plicable to all	LRRs. unless other	rwise note	d.)	Ind	cators for Problemati	c Hydric Soils3:
	priodibio to dii			/			o riyana oono .
Histosol (A1) Histic Epipedon (A2)	-	Sandy Redox (S: Stripped Matrix (2 cm Muck (A10) Red Parent Material (T	E2)
Black Histic (A3)	-	Loamy Mucky M		except MLR		Very Shallow Dark Sur	
Hydrogen Sulfide (A4)	_	Loamy Gleyed M		oxoopt man		Other (Explain in Rema	
Depleted Below Dark Su	face (A11)	Depleted Matrix					
Thick Dark Surface (A12		Redox Dark Surf				3Indicators of hydrophy	tic vegetation and
Sandy Mucky Mineral (S		Depleted Dark S				wetland hydrology mus	
Sandy Gleyed Matrix (S4		Redox Depression	ons (F8)			unless disturbed or pro	blematic
estrictive Layer (if present):							
				Unidaio Co	I Dranant?	Van	No X
				nyunc so	il Present?	Yes	NO
Depth (inches):				1			
DROLOGY							
etland Hydrology Indicators	:						
						ndary Indicators (2 or m	
imary Indicators (minimum of		Water-Staine			W	ater-Stained Leaves (B	
imary Indicators (minimum of Surface Water (A1)		Water-Staine MLRA 1, 2, 4	A, and 4B		V\ 4/	ater-Stained Leaves (B A, and 4B)	
mary Indicators (minimum of Surface Water (A1) High Water Table (A2)		Water-Staine MLRA 1, 2, 4 Salt Crust (B	1A, and 4B 11))	W	ater-Stained Leaves (B A, and 4B) rainage Patterns (B10)	89) (MLRA 1, 2,
imary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3)		Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inver	AA, and AB 11) rtebrates (B	13)	W	dater-Stained Leaves (B A, and 4B) rainage Patterns (B10) ry-Season Water Table	(C2)
imary Indicators (minimum of Surface Water (A1) High Water Table (A2)		Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inver Hydrogen Su	4A, and 4B 11) rtebrates (B ulfide Odor (13) (C1)	W	ater-Stained Leaves (B A, and 4B) rainage Patterns (B10)	(C2)
mary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3)		Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inver	4A, and 4B 11) rtebrates (B ulfide Odor (13) (C1)		later-Stained Leaves (B A, and 4B) rainage Patterns (B10) ry-Season Water Table aturation Visible on Aer	(C2) ial Imagery (C9)
imary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)		Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi	1A, and 4B 11) rtebrates (B alfide Odor (zospheres	13) (C1) along Living	W 44 — D D D S S	dater-Stained Leaves (B A, and 4B) rainage Patterns (B10) ry-Season Water Table	(C2) ial Imagery (C9)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)		Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi Roots (C3) Presence of I Recent Iron F	AA, and AB 11) rtebrates (B ulfide Odor (zospheres a	13) (C1) along Living	W 44 — D D S S S S S S S S S S S S S S S S S	later-Stained Leaves (BA, and 4B) rainage Patterns (B10) ry-Season Water Table aturation Visible on Aer eomorphic Position (D2) hallow Aquitard (D3)	(C2) ial Imagery (C9)
imary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)		Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi Roots (C3) Presence of I Recent Iron F Soils (C6)	4A, and 4B 11) rtebrates (B alfide Odor (zospheres a Reduced Iro Reduction in	13) (C1) along Living on (C4) n Tilled	W 44 — D D S S S S S S S S S S S S S S S S S	later-Stained Leaves (B A, and 4B) rainage Patterns (B10) ry-Season Water Table aturation Visible on Aer eomorphic Position (D2	(C2) ial Imagery (C9)
imary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)		Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi Roots (C3) Presence of I Recent Iron F Soils (C6) Stunted or St	4A, and 4B 11) rtebrates (B alfide Odor (zospheres a Reduced Iro Reduction in	13) (C1) along Living on (C4) n Tilled	W 4/	Vater-Stained Leaves (BA, and 4B) rainage Patterns (B10) ry-Season Water Table aturation Visible on Aer eomorphic Position (D2 hallow Aquitard (D3) AC-Neutral Test (D5)	(C2) ial Imagery (C9)
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)		Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi Roots (C3) Presence of I Recent Iron F Soils (C6) Stunted or St (LRR A)	4A, and 4B 11) rtebrates (B lifide Odor (zospheres a Reduced Int Reduction in tressed Plan	13) (C1) along Living on (C4) Tilled onts (D1)	W 44 D D Si Si Fi	Vater-Stained Leaves (EA, and 4B) rainage Patterns (B10) ry-Season Water Table aturation Visible on Aer eomorphic Position (D2 hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6)	(C2) ial Imagery (C9) (LRR A)
Mary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	one required;	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi Roots (C3) Presence of I Recent Iron F Soils (C6) Stunted or St	4A, and 4B 11) rtebrates (B lifide Odor (zospheres a Reduced Int Reduction in tressed Plan	13) (C1) along Living on (C4) Tilled onts (D1)	W 44 D D Si Si Fi	Vater-Stained Leaves (BA, and 4B) rainage Patterns (B10) ry-Season Water Table aturation Visible on Aer eomorphic Position (D2 hallow Aquitard (D3) AC-Neutral Test (D5)	(C2) ial Imagery (C9) (LRR A)
mary Indicators (minimum of 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)	one required;	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi Roots (C3) Presence of I Recent Iron F Soils (C6) Stunted or St (LRR A)	4A, and 4B 11) rtebrates (B lifide Odor (zospheres a Reduced Int Reduction in tressed Plan	13) (C1) along Living on (C4) Tilled onts (D1)	W 44 D D Si Si Fi	Vater-Stained Leaves (EA, and 4B) rainage Patterns (B10) ry-Season Water Table aturation Visible on Aer eomorphic Position (D2 hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6)	(C2) ial Imagery (C9)
imary Indicators (minimum of 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 Sparsely Vegetated Concave	one required;	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi Roots (C3) Presence of I Recent Iron F Soils (C6) Stunted or St (LRR A)	4A, and 4B 11) rtebrates (B lifide Odor (zospheres a Reduced Int Reduction in tressed Plan	13) (C1) along Living on (C4) Tilled onts (D1)	W 44 D D Si Si Fi	Vater-Stained Leaves (EA, and 4B) rainage Patterns (B10) ry-Season Water Table aturation Visible on Aer eomorphic Position (D2 hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6)	(C2) ial Imagery (C9) (LRR A)
imary Indicators (minimum of 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 Sparsely Vegetated Concaveled Observations:	magery (B7) Surface (B8)	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi Roots (C3) Presence of I Recent Iron F Soils (C6) Stunted or St (LRR A) Other (Explain	4A, and 4B 11) rtebrates (B lifide Odor (zospheres a Reduced Int Reduction in tressed Plan	13) (C1) along Living on (C4) Tilled onts (D1)	W 44 D D Si Si Fi	Vater-Stained Leaves (EA, and 4B) rainage Patterns (B10) ry-Season Water Table aturation Visible on Aer eomorphic Position (D2 hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6)	(C2) ial Imagery (C9) (LRR A)
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 Sparsely Vegetated Concaveled Observations:	magery (B7) e Surface (B8)	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi Roots (C3) Presence of I Recent Iron F Soils (C6) Stunted or St (LRR A) Other (Explai	4A, and 4B 11) rtebrates (B Ilfide Odor (zospheres a Reduced In Reduction in tressed Plan in in Reman	13) C1) along Living on (C4) n Tilled onts (D1) ks)	W 44 D D S S S S S S S S S S S S S S S S S S	Vater-Stained Leaves (BA, and 4B) rainage Patterns (B10) ry-Season Water Table aturation Visible on Aer eomorphic Position (D2 hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) rost-Heave Hummocks	(C2) ial Imagery (C9) (LRR A) (D7)
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 Sparsely Vegetated Concave eld Observations: urface Water Present? Yeater Table Present?	magery (B7) e Surface (B8)	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi Roots (C3) Presence of I Recent Iron F Soils (C6) Stunted or St (LRR A) Other (Explain	4A, and 4B 11) rtebrates (B Ilfide Odor (zospheres a Reduced In Reduction in tressed Plan in in Reman	13) C1) along Living on (C4) n Tilled onts (D1) ks)	W 44 D D S S S S S S S S S S S S S S S S S S	Vater-Stained Leaves (EA, and 4B) rainage Patterns (B10) ry-Season Water Table aturation Visible on Aer eomorphic Position (D2 hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6)	(C2) ial Imagery (C9) (LRR A) (D7)
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 Sparsely Vegetated Concave eld Observations: urface Water Present? Staturation Present?	magery (B7) e Surface (B8) es No	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi: Roots (C3) Presence of I Recent Iron F Soils (C6) Stunted or St (LRR A) Other (Explai	AA, and 4B, 11) rtebrates (B lifide Odor (zospheres : Reduced Irr Reduction in tressed Plan in in Remar	13) C1) along Living on (C4) n Tilled onts (D1) ks)	W 44 D D S S S S S S S S S S S S S S S S S S	Vater-Stained Leaves (BA, and 4B) rainage Patterns (B10) ry-Season Water Table aturation Visible on Aer eomorphic Position (D2 hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) rost-Heave Hummocks	(C2) ial Imagery (C9) (LRR A) (D7)
imary Indicators (minimum of 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 Sparsely Vegetated Concaveled Observations: Irface Water Present? Interest of Saturation Present? Intere	magery (B7) e Surface (B8) es No es No	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi: Roots (C3) Presence of I Recent Iron F Soils (C6) Stunted or St (LRR A) Other (Explai	AA, and 4B 11) rtebrates (B Ilfide Odor (zospheres : Reduced Irr Reduction in tressed Plan in in Remar	13) C1) along Living on (C4) n Tilled onts (D1) ks) Wet	W 4/ L D S S S R R F R F S dand Hydro	Vater-Stained Leaves (EA, and 4B) rainage Patterns (B10) ry-Season Water Table aturation Visible on Aer eomorphic Position (D2 hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) ost-Heave Hummocks	(C2) ial Imagery (C9) (LRR A) (D7)
imary Indicators (minimum of 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 Sparsely Vegetated Concaveled Observations: Irface Water Present? Atter Table Present?	magery (B7) e Surface (B8) es No es No	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi: Roots (C3) Presence of I Recent Iron F Soils (C6) Stunted or St (LRR A) Other (Explai	AA, and 4B 11) rtebrates (B Ilfide Odor (zospheres : Reduced Irr Reduction in tressed Plan in in Remar	13) C1) along Living on (C4) n Tilled onts (D1) ks) Wet	W 4/ L D S S S R R F R F S dand Hydro	Vater-Stained Leaves (EA, and 4B) rainage Patterns (B10) ry-Season Water Table aturation Visible on Aer eomorphic Position (D2 hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) ost-Heave Hummocks	(C2) ial Imagery (C9) (LRR A) (D7)
imary Indicators (minimum of 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 Sparsely Vegetated Concave (B1) Sediment Deposits (B2) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Wolface Soil Cracks (B6) Inundation Visible on Aerial Sparsely Vegetated Concave (B1) Sediment Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Sparsely Vegetated Concave (B1) End Observations: Irface Water Present? Yesturation Present? Cuter Table Present? Cuter Capillary fringe) Cribe Recorded Data (stream	magery (B7) e Surface (B8) es No es No	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi: Roots (C3) Presence of I Recent Iron F Soils (C6) Stunted or St (LRR A) Other (Explai	AA, and 4B 11) rtebrates (B Ilfide Odor (zospheres : Reduced Irr Reduction in tressed Plan in in Remar	13) C1) along Living on (C4) n Tilled onts (D1) ks) Wet	W 4/ L D S S S R R F R F S dand Hydro	Vater-Stained Leaves (EA, and 4B) rainage Patterns (B10) ry-Season Water Table aturation Visible on Aer eomorphic Position (D2 hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) ost-Heave Hummocks	(C2) ial Imagery (C9) (LRR A) (D7)
imary Indicators (minimum of 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 Sparsely Vegetated Concaveled Observations: rface Water Present? After Table Present? Surface Vater Table Present? Cuturation Present? Cuturation Present? Cuturation Present?	magery (B7) e Surface (B8) es No es No	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Roots (C3) Presence of I Recent Iron F Soils (C6) Stunted or St (LRR A) Other (Explai	AA, and 4B 11) rtebrates (B Ilfide Odor (zospheres : Reduced Irr Reduction in tressed Plan in in Remar	13) C1) along Living on (C4) n Tilled onts (D1) ks) Wet	W 4/ L D S S S R R F R F S dand Hydro	Vater-Stained Leaves (EA, and 4B) rainage Patterns (B10) ry-Season Water Table aturation Visible on Aer eomorphic Position (D2 hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) ost-Heave Hummocks	(C2) (C2) (C9) (C9) (C9) (C9) (C9) (C9) (C9) (C9
mary Indicators (minimum of 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 Sparsely Vegetated Concave (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Sparsely Vegetated Concave (B1) Sparsely Vegetated (B1) Sp	magery (B7) e Surface (B8) es No es No	Water-Staine MLRA 1, 2, 4 Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Roots (C3) Presence of I Recent Iron F Soils (C6) Stunted or St (LRR A) Other (Explai	AA, and 4B 11) rtebrates (B Ilfide Odor (zospheres : Reduced Irr Reduction in tressed Plan in in Remar	13) C1) along Living on (C4) n Tilled onts (D1) ks) Wet	W 4/ L D S S S R R F R F S dand Hydro	Vater-Stained Leaves (EA, and 4B) rainage Patterns (B10) ry-Season Water Table aturation Visible on Aer eomorphic Position (D2 hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) ost-Heave Hummocks	(C2) (C2) (C9) (C9) (C9) (C9) (C9) (C9) (C9) (C9

Applicant/Owner: Investigator(s): Landform (hillslope, terrace, etc.): Subregion (LRR): A Last Soil Map Unit Name: Are climatic / hydrologic conditions on the site typical Are Vegetation , Soil , or Hydrology Are Vegetation , Soil , or Hydrology	State: WA Sampling Section, Township, Range: Local relief (concave, convex, n Long: 122. No. If or this time of year? Yes No significantly disturbed? Are "No naturally problematic? (in	Datum: WGS84 WI classification: (If no, explain in Remarks.) mal Circumstances" present? Yes No If needed, explain any answers in Remarks.)
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area with	in a Wetland? Yes No
Remarks: Removed mater	ral .	
VEGETATION - Use scientific names of	plants.	
Tree Stratum (Plot size: 30' d.) 1.	Absolute Dominant Indicator <u>% Cover Species? Status</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3.		Total Number of Dominant Species Across All Strata: (B) Percent of Dominant Species
4.		That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size: 20' d.) 1	= Total Cover	Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 =
3.		FACW species x 2 =
4		FAC species x 3 =
0.	= Total Cover	FACU species x 4 =
Herb Stratum (Plot size: 10' d.)	= Total Cover	UPL species
2.		Prevalence Index = B/A =
3.		
4.		Hydrophytic Vegetation Indicators:
5.		1 - Rapid Test for Hydrophytic Vegetation
6		2 - Dominance Test is >50%
8.		 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting
9.		data in Remarks or on a separate sheet)
10.		5 - Wetland Non-Vascular Plants ¹
11.		Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size:) 1.	= Total Cover	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
% Bare Ground in Herb Stratum	= Total Cover	Hydrophytic Vegetation Present? Yes No
Not hydric >NO	saturation -	no hydrophytic

OIL Profile Description: (Describe to the de	pth needed to docu	ment the in	dicator or co	nfirm the ab	Sampling Point sence of indicators.)
Depth Matrix		Redox Fea	atures			
(inches) Color (moist) %	Color (moist)	%	Type ¹	_Loc2	Texture	Remarks
0-20 7516 /2 100		-	-		5,40	
10						
professional designation of the second second			-	-		14
		-		-	-	
					* 1	
		-				
			-		4	
					- Line	
					2	
	***************************************				2	
					4/22	
Type: C=Concentration, D=Depletion, RN	1=Reduced Matrix, C	S=Covered	or Coated Sa	nd Grains.	² Location: PL=Pore	Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to a	II LRRs, unless oth	erwise note	ed.)	Indic	ators for Problemati	c Hydric Soils3:
Histosol (A1)	Sandy Redox (cm Muck (A10)	
Histic Epipedon (A2)	Stripped Matrix			A STATE OF THE PARTY OF THE PAR	led Parent Material (T	F2)
Black Histic (A3)	Loamy Mucky		(except MLR		ery Shallow Dark Sur	
Hydrogen Sulfide (A4)	Loamy Gleyed				ther (Explain in Rema	
Depleted Below Dark Surface (A11)	Depleted Matri					
Thick Dark Surface (A12)	Redox Dark St				ndicators of hydrophy	
Sandy Mucky Mineral (S1)	Depleted Dark)	W. W.	etland hydrology mus	t be present,
Sandy Gleyed Matrix (S4)	Redox Depress	sions (F8)		u	nless disturbed or pro	blematic
estrictive Layer (if present):						
Type:			Hydric Soi	il Present?	Yes	No X
Depth (inches):			riyunc 30	ii rieseiitr	103	NO
narks: moved man	1					
'DROLOGY	7					
etland Hydrology Indicators:			- ef	- Transfer of the second		1
rimary Indicators (minimum of one required					dary Indicators (2 or m	
			B9) (except		ter-Stained Leaves (E	9) (MLRA 1, 2,
Surface Water (A1)		4A, and 4B	5)		and 4B)	
High Water Table (A2) Saturation (A3)	Salt Crust (1421		inage Patterns (B10)	(00)
Water Marks (B1)		ertebrates (E Sulfide Odor			-Season Water Table	
Valer Marks (D1)		hizospheres		Sat	uration Visible on Aer	iai imagery (C9)
Sediment Deposits (B2)	Roots (C3)	nizospiicios	along Living	Ge	omorphic Position (D2) 4
Drift Deposits (B3)		f Reduced In	on (C4)		allow Aquitard (D3)	1
		Reduction is				100
Algal Mat or Crust (B4)	Soils (C6)			FA	C-Neutral Test (D5)	
1	Stunted or	Stressed Pla	nts (D1)			malaret P
Iron Deposits (B5)	(LRR A)				sed Ant Mounds (D6)	
Surface Soil Cracks (B6)	Other (Expl	ain in Remar	rks)	Fro	st-Heave Hummocks	(D7)
Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8	1)					
operation Contrave Guilage (Bo	'/			7		
eld Observations:						
urface Water Present? Yes No	Depth (inches):				100
ater Table Present? Yes No	Depth (inches	,	Wet	land Hydrold	ogy Present? Yes	No V
aturation Present?	1 0			iij di oli	a)	
ncludes capillary fringe) Yes No	Depth (inches				94C	4
cribe Recorded Data (stream gauge, moni	toring well, aerial pho	otos, previou	s inspections)), if available:		4,
					- 6	
arks:				7. 4		10
				y hill	4.5	25
				A SHIP	4)	400

Applicant/Owner: Sester Forms Investigator(s): R. Brewer Landform (hillslope, terrace, etc.): Terrace Subregion (LRR): A La Soil Map Unit Name: Deen no Are climatic / hydrologic conditions on the site typical Are Vegetation Soil or Hydrology Are Vegetation Soil or Hydrology	at: 45.42203 Long: -122.4 All for this time of year? Yes No significantly disturbed? Are "No naturally problematic? map showing sampling point less the Sampled Area with	Point: DP19 D2S, 03E Slope (%): Slope Point: WGS84 NI classification: (If no, explain in Remarks.) Diff needed, explain any answers in Remarks.) Docations, transects, important features, etc.
VEGETATION - Use scientific names o	f plants.	
<u>Tree Stratum</u> (Plot size: 30' d.)	Absolute Dominant Indicator <u>% Cover Species? Status</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2.		Total Number of Dominant Species Across All Strata: (B)
3		Percent of Dominant Species
		That Are OBL, FACW, or FAC: (A/B)
	= Total Cover	
Sapling/Shrub Stratum (Plot size: 20' d,)	20 Y FA	Prevalence Index worksheet: Total % Cover of: Multiply by:
2. T. Black (R. Ursinus)	15 Y BACU	Total % Cover of: Multiply by: OBL species x 1 =
3. E. Black (R Jaciniatus)	10 Y Pricu	FACW species x 2 =
4.		FAC species x 3 =
5		FACU species x 4 =
Herb Stratum (Plot size: 10' d.)	= Total Cover	UPL species x 5 =
1. (RAlace)	20 Y FACU	Column Totals: (A) (B)
2. THairgrass (Deschampsiaces	pitesa)30 Y	Prevalence Index = B/A =
4.		Hydrophytic Vegetation Indicators:
5.		1 - Rapid Test for Hydrophytic Vegetation
6.		2 - Dominance Test is >50%
7.		3 - Prevalence Index is ≤3.0¹
8. 9.		 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
10.		5 - Wetland Non-Vascular Plants¹
11.		Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size:)	= Total Cover	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1		
	= Total Cover	Hydrophytic Vegetation
% Bare Ground in Herb Stratum	1 2 2	Present? Yes No
Remarks:		
rveriging.		*

IL State (December 1)	- 4- 4b141	nandad to decise	of the indicator or a	ntiem the sheet	Sampling Point:	
Profile Description: (Description: Matri		needed to docume	nt the indicator or co edox Features	minim the abser	ice of indicators.)	
Depth Matri (inches) Color (moist)	%	Color (moist)	% Type ¹	Loc ²	Texture	Remarks
-7 75483/s	100				c.1.2	
7.10 7.4/0///	100	-	-	-	210	
1-12 +5 1K4/4	100				2160	
7-19 751R4/4	85	7.54R 4/6	101 5	M	51 LO	
9-24 75YR44	50	7588 U/A	10 0	NO	10/0	
4-14 15114	20	13/187/0			110:	***************************************
4011/3/3	50			-	2) 3/	
				-		
Type: C=Concentration, D=D	epletion, RM=F	Reduced Matrix, CS=0	Covered or Coated Sa	and Grains. ² L	ocation: PL=Pore I	Lining, M=Matrix.
Hydric Soil Indicators: (App	licable to all I	RRs. unless otherw	rise noted.)	Indicato	ors for Problematic	c Hydric Soils ³ :
	mousio to an .				Muck (A10)	,
Histosol (A1) Histic Epipedon (A2)		Sandy Redox (S5) Stripped Matrix (S6)			Parent Material (TI	F2)
Black Histic (A3)			eral (F1) (except MLI		Shallow Dark Surf	
Hydrogen Sulfide (A4)		Loamy Gleyed Mat			er (Explain in Rema	
Depleted Below Dark Sur	face (A11)	Depleted Matrix (F	3)			
Thick Dark Surface (A12)		Redex Dark Surface			cators of hydrophyl	
Sandy Mucky Mineral (S1		Depleted Dark Sur Redox Depression			and hydrology mus ss disturbed or prol	
Sandy Gleyed Matrix (S4)		_ Idday Debiession	3 (1 0)	unie	oo diatalibed of prof	Distribution
estrictive Layer (if present):						1/
Type:			Hydric Sc	oil Present?	Yes	No X
Depth (inches):						
narks: Features W/a	distinct	boundaires	s-not re	(ox - 0)	id weath	nering
DROLOGY		boundaries	s-not re	(0x - 0)	ind weath	nering
DROLOGY etland Hydrology Indicators			s-not re			
DROLOGY etland Hydrology Indicators		theck all that apply)	Leaves (B9) (except	Secondar	y Indicators (2 or m	ore required)
DROLOGY etland Hydrology Indicators		theck all that apply) Water-Stained MLRA 1, 2, 4A	Leaves (B9) (except	Secondar	y Indicators (2 or m -Stained Leaves (B	ore required)
DROLOGY etland Hydrology Indicators imary Indicators (minimum of Surface Water (A1) High Water Table (A2)		heck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11	Leaves (B9) (except , and 4B)	Secondar Water 4A, ar	y Indicators (2 or m -Stained Leaves (B nd 4B) nge Patterns (B10)	ore required) 9) (MLRA 1, 2,
DROLOGY etland Hydrology Indicators imary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3)		wheck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte	Leaves (B9) (except , and 4B)) ebrates (B13)	Secondar Water 4A, ar Draina	y Indicators (2 or m Stained Leaves (B Ind 4B) Ige Patterns (B10) Beason Water Table	ore required) 9) (MLRA 1, 2,
DROLOGY etland Hydrology Indicators imary Indicators (minimum of Surface Water (A1) High Water Table (A2)		wheck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulfi	Leaves (B9) (except , and 4B)) ebrates (B13) de Odor (C1)	Secondar Water 4A, ar Draina	y Indicators (2 or m -Stained Leaves (B nd 4B) nge Patterns (B10)	ore required) 9) (MLRA 1, 2,
DROLOGY etland Hydrology Indicators imary Indicators (minimum of a Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)		wheck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulficontided Rhizo	Leaves (B9) (except , and 4B)) ebrates (B13)	Secondar Water 4A, ar Draina Dry-Si Satura	y Indicators (2 or m -Stained Leaves (B nd 4B) age Patterns (B10) eason Water Table attion Visible on Aeri	ore required) 9) (MLRA 1, 2, (C2) ial Imagery (C9)
DROLOGY etland Hydrology Indicators imary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3)		water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulfio Oxidized Rhizo Roots (C3)	Leaves (B9) (except , and 4B)) ebrates (B13) de Odor (C1)	Secondar Water 4A, ar Draina Dry-Si Satura	y Indicators (2 or m -Stained Leaves (B nd 4B) ge Patterns (B10) eason Water Table ation Visible on Aeri	ore required) 9) (MLRA 1, 2, (C2) ial Imagery (C9)
DROLOGY etland Hydrology Indicators imary Indicators (minimum of a Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)		water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulfio Oxidized Rhizo Roots (C3) Presence of Re	Leaves (B9) (except , and 4B)) brates (B13) de Odor (C1) espheres along Living	Secondar Water 4A, ar Draina Dry-Si Satura	y Indicators (2 or m -Stained Leaves (B nd 4B) age Patterns (B10) eason Water Table attion Visible on Aeri	ore required) 9) (MLRA 1, 2, (C2) ial Imagery (C9)
EDROLOGY etland Hydrology Indicators imary Indicators (minimum of a surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)		wheck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulfii Oxidized Rhizo Roots (C3) Presence of Re Recent Iron Re Soils (C6)	Leaves (B9) (except , and 4B)) brates (B13) de Odor (C1) spheres along Living educed Iron (C4) eduction in Tilled	Secondar Water 4A, ar Draina Dry-S Satura Geom Shallo	y Indicators (2 or m -Stained Leaves (B nd 4B) ge Patterns (B10) eason Water Table ation Visible on Aeri	ore required) 9) (MLRA 1, 2, (C2) ial Imagery (C9)
FOROLOGY Fetland Hydrology Indicators rimary Indicators (minimum of a surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)		wheck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulfii Oxidized Rhizo Roots (C3) Presence of Re Recent Iron Re Soils (C6) Stunted or Stre	Leaves (B9) (except , and 4B)) brates (B13) de Odor (C1) expheres along Living	Secondar Water 4A, ar Draina Dry-S Satura Geom Shallo	y Indicators (2 or m -Stained Leaves (B nd 4B) ge Patterns (B10) eason Water Table attion Visible on Aeri orphic Position (D2 w Aquitard (D3)	ore required) 9) (MLRA 1, 2, (C2) ial Imagery (C9)
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)		wheck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulfio Oxidized Rhizo Roots (C3) Presence of Re Recent Iron Re Soils (C6) Stunted or Stre (LRR A)	Leaves (B9) (except , and 4B))) ibrates (B13) de Odor (C1) ispheres along Living educed Iron (C4) eduction in Tilled	Secondar Water 4A, ar Draina Dry-S Satura Geom Shallo FAC-N	y Indicators (2 or m -Stained Leaves (B d 4B) ge Patterns (B10) eason Water Table attion Visible on Aeri orphic Position (D2 w Aquitard (D3) leutral Test (D5)	ore required) 9) (MLRA 1, 2, (C2) ial Imagery (C9)
DROLOGY etland Hydrology Indicators imary Indicators (minimum of a 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)	: one required; c	wheck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulfii Oxidized Rhizo Roots (C3) Presence of Re Recent Iron Re Soils (C6) Stunted or Stre	Leaves (B9) (except , and 4B))) ibrates (B13) de Odor (C1) ispheres along Living educed Iron (C4) eduction in Tilled	Secondar Water 4A, ar Draina Dry-S Satura Geom Shallo FAC-N	y Indicators (2 or m -Stained Leaves (B nd 4B) ge Patterns (B10) eason Water Table attion Visible on Aeri orphic Position (D2 w Aquitard (D3)	ore required) 9) (MLRA 1, 2, (C2) ial Imagery (C9)
DROLOGY etland Hydrology Indicators imary Indicators (minimum of a 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)	: one required; c	wheck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulfio Oxidized Rhizo Roots (C3) Presence of Re Recent Iron Re Soils (C6) Stunted or Stre (LRR A)	Leaves (B9) (except , and 4B))) ibrates (B13) de Odor (C1) ispheres along Living educed Iron (C4) eduction in Tilled	Secondar Water 4A, ar Draina Dry-S Satura Geom Shallo FAC-N	y Indicators (2 or m -Stained Leaves (B d 4B) ge Patterns (B10) eason Water Table attion Visible on Aeri orphic Position (D2 w Aquitard (D3) leutral Test (D5)	ore required) 9) (MLRA 1, 2, (C2) ial Imagery (C9)
EDROLOGY Tetland Hydrology Indicators imary Indicators (minimum of 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 Concaver.	: one required; c	wheck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulfio Oxidized Rhizo Roots (C3) Presence of Re Recent Iron Re Soils (C6) Stunted or Stre (LRR A)	Leaves (B9) (except , and 4B))) ibrates (B13) de Odor (C1) ispheres along Living educed Iron (C4) eduction in Tilled	Secondar Water 4A, ar Draina Dry-Sc Satura Geom Shallo FAC-N	y Indicators (2 or m -Stained Leaves (B d 4B) ge Patterns (B10) eason Water Table attion Visible on Aeri orphic Position (D2 w Aquitard (D3) leutral Test (D5)	ore required) 9) (MLRA 1, 2, (C2) ial Imagery (C9)
PROLOGY Tetland Hydrology Indicators rimary Indicators (minimum of 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 Concavered	magery (B7)	wheck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulfic Oxidized Rhizo Roots (C3) Presence of Re Recent Iron Re Soils (C6) Stunted or Stre (LRR A) Other (Explain	Leaves (B9) (except , and 4B))) ibrates (B13) de Odor (C1) ispheres along Living educed Iron (C4) eduction in Tilled	Secondar Water 4A, ar Draina Dry-Sc Satura Geom Shallo FAC-N	y Indicators (2 or m -Stained Leaves (B d 4B) ge Patterns (B10) eason Water Table attion Visible on Aeri orphic Position (D2 w Aquitard (D3) leutral Test (D5)	ore required) 9) (MLRA 1, 2, (C2) ial Imagery (C9)
PROLOGY Tetland Hydrology Indicators imary Indicators (minimum of 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 and C	magery (B7) Surface (B8)	wheck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulfic Oxidized Rhizo Roots (C3) Presence of Re Recent Iron Re Soils (C6) Stunted or Stre (LRR A) Other (Explain	Leaves (B9) (except , and 4B) l) brates (B13) de Odor (C1) spheres along Living educed Iron (C4) eduction in Tilled essed Plants (D1) in Remarks)	Secondar Water 4A, ar Draina Dry-Si Satura Geom Shallo FAC-N Raisee Frost-	y Indicators (2 or m Stained Leaves (B nd 4B) age Patterns (B10) eason Water Table attion Visible on Aeri orphic Position (D2 w Aquitard (D3) deutral Test (D5) d Ant Mounds (D6) Heave Hummocks	ore required) 9) (MLRA 1, 2, (C2) ial Imagery (C9)) (LRR A) (D7)
PROLOGY Tetland Hydrology Indicators imary Indicators (minimum of 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? Yester Table Present?	magery (B7) Surface (B8)	wheck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulfic Oxidized Rhizo Roots (C3) Presence of Re Recent Iron Re Soils (C6) Stunted or Stre (LRR A) Other (Explain	Leaves (B9) (except , and 4B) l) brates (B13) de Odor (C1) spheres along Living educed Iron (C4) eduction in Tilled essed Plants (D1) in Remarks)	Secondar Water 4A, ar Draina Dry-Sc Satura Geom Shallo FAC-N	y Indicators (2 or m Stained Leaves (B nd 4B) age Patterns (B10) eason Water Table attion Visible on Aeri orphic Position (D2 w Aquitard (D3) deutral Test (D5) d Ant Mounds (D6) Heave Hummocks	ore required) 9) (MLRA 1, 2, (C2) ial Imagery (C9)) (LRR A) (D7)
etland Hydrology Indicators imary Indicators (minimum of 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? Algal Mater Table Present?	magery (B7) Surface (B8) s No s No	wheck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulficond (C3) Presence of Reference of Reference of Reference of Reference of Stunted or Streference (LRR A) Other (Explain Depth (inches): Depth (inches):	Leaves (B9) (except , and 4B) l) brates (B13) de Odor (C1) spheres along Living educed Iron (C4) eduction in Tilled essed Plants (D1) in Remarks)	Secondar Water 4A, ar Draina Dry-Si Satura Geom Shallo FAC-N Raisee Frost-	y Indicators (2 or m Stained Leaves (B nd 4B) age Patterns (B10) eason Water Table attion Visible on Aeri orphic Position (D2 w Aquitard (D3) deutral Test (D5) d Ant Mounds (D6) Heave Hummocks	ore required) 9) (MLRA 1, 2, (C2) ial Imagery (C9)) (LRR A) (D7)
etland Hydrology Indicators imary Indicators (minimum of 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 II Sparsely Vegetated Concave eld Observations: Inface Water Present? Yester Table Present? Inturation Present? Yester Cludes capillary fringe)	magery (B7) s Surface (B8) s No s	wheck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulfic Oxidized Rhizo Roots (C3) Presence of Re Recent Iron Re Soils (C6) Stunted or Stre (LRR A) Other (Explain Depth (inches): Depth (inches):	Leaves (B9) (except , and 4B) brates (B13) de Odor (C1) expheres along Living educed Iron (C4) eduction in Tilled essed Plants (D1) in Remarks) We	Secondar Water 4A, ar Dry-Si Satura Geom Shallo FAC-N Raised Frost-	y Indicators (2 or m Stained Leaves (B nd 4B) age Patterns (B10) eason Water Table attion Visible on Aeri orphic Position (D2 w Aquitard (D3) deutral Test (D5) d Ant Mounds (D6) Heave Hummocks	ore required) 9) (MLRA 1, 2, (C2) ial Imagery (C9)) (LRR A) (D7)
DROLOGY etland Hydrology Indicators mary Indicators (minimum of a 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 II Sparsely Vegetated Concave eld Observations: rface Water Present? Ye ater Table Present?	magery (B7) s Surface (B8) s No s	wheck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulfic Oxidized Rhizo Roots (C3) Presence of Re Recent Iron Re Soils (C6) Stunted or Stre (LRR A) Other (Explain Depth (inches): Depth (inches):	Leaves (B9) (except , and 4B) brates (B13) de Odor (C1) expheres along Living educed Iron (C4) eduction in Tilled essed Plants (D1) in Remarks) We	Secondar Water 4A, ar Dry-Si Satura Geom Shallo FAC-N Raised Frost-	y Indicators (2 or m Stained Leaves (B nd 4B) age Patterns (B10) eason Water Table attion Visible on Aeri orphic Position (D2 w Aquitard (D3) deutral Test (D5) d Ant Mounds (D6) Heave Hummocks	ore required) 9) (MLRA 1, 2, (C2) ial Imagery (C9)) (LRR A) (D7)
DROLOGY Itland Hydrology Indicators mary Indicators (minimum of a 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 and Observations: Inface Water Present? Yester Table Present? Yester Table Present? Yester Table Present? Yester Table Recorded Data (stream of the content of	magery (B7) s Surface (B8) s No s	wheck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulfic Oxidized Rhizo Roots (C3) Presence of Re Recent Iron Re Soils (C6) Stunted or Stre (LRR A) Other (Explain Depth (inches): Depth (inches):	Leaves (B9) (except , and 4B) brates (B13) de Odor (C1) expheres along Living educed Iron (C4) eduction in Tilled essed Plants (D1) in Remarks) We	Secondar Water 4A, ar Dry-Si Satura Geom Shallo FAC-N Raised Frost-	y Indicators (2 or m Stained Leaves (B nd 4B) age Patterns (B10) eason Water Table attion Visible on Aeri orphic Position (D2 w Aquitard (D3) deutral Test (D5) d Ant Mounds (D6) Heave Hummocks	ore required) 9) (MLRA 1, 2, (C2) ial Imagery (C9)) (LRR A) (D7)
DROLOGY Patland Hydrology Indicators mary Indicators (minimum of a 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 II Sparsely Vegetated Concave Pater Table Present? Yeater Table Present? Yeater Table Present? Cludes capillary fringe) Yeater Table Present?	magery (B7) s Surface (B8) s No s	wheck all that apply) Water-Stained MLRA 1, 2, 4A Salt Crust (B11 Aquatic Inverte Hydrogen Sulfic Oxidized Rhizo Roots (C3) Presence of Re Recent Iron Re Soils (C6) Stunted or Stre (LRR A) Other (Explain Depth (inches): Depth (inches):	Leaves (B9) (except , and 4B) brates (B13) de Odor (C1) expheres along Living educed Iron (C4) eduction in Tilled essed Plants (D1) in Remarks) We	Secondar Water 4A, ar Dry-Si Satura Geom Shallo FAC-N Raised Frost-	y Indicators (2 or m Stained Leaves (B nd 4B) age Patterns (B10) eason Water Table attion Visible on Aeri orphic Position (D2 w Aquitard (D3) deutral Test (D5) d Ant Mounds (D6) Heave Hummocks	ore required) 9) (MLRA 1, 2, (C2) ial Imagery (C9)) (LRR A) (D7)

Applicant/Owner: Sector Factor's Investigator(s): R. Brewer Landform (hillslope, terrace, etc.): Terract Plants Subregion (LRR): A Lat: Soil Map Unit Name: Deleng Ma Are climatic / hydrologic conditions on the site typical for Are Vegetation X, Soil , or Hydrology Are Vegetation , Soil , or Hydrology	Section, To Lood 15 17	State: WA ownship, Range cal relief (conca 214 Long: cof year? Yes cantly disturbed ally problematic ving sampli	Sampling ve, convex, n -127-415 No Are "No ?	M classification: WGS84
MEGETATION Has accordific names of	nlanta			
Tree Stratum (Plot size: 30' d.) 1. B. Cot fon (Pop. balson) feed 2. 3. 4.	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: (A) (B)
		= Total Cove	er	Boundary Index wordshoot
Sapling/Shrub Stratum (Plot size: 20'd.) 1. Hr. Black(2. E. Black(3. D. Spire G 4.		Y	FAC FACY FACW	Prevalence Index worksheet:
5.	-	=		FACU species x 4 =
Herb Stratum (Plot size: 10' d.)		= Total Cove	er	UPL species x 5 =
1. Cr. Butterau p(Ran. repens).	2	Ž	FAC	Column Totals: (A) (B) Prevalence Index = B/A =
3. RC Grass (Phalas is a Conditional 4. 5. 6. 7. 8. 9. 10.				Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size:) 1.		_ = 10tal Cove	ər	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
% Bare Ground in Herb Stratum		= Total Cove	er	Hydrophytic Vegetation Present? Yes No
Pinus cantor ta (FAC) No obligante-wetla	Plan t	led alongeries	ng pro	pertyline a Hydric Sail/No Saturation

SOIL						Se.	Sampling Point	DP20
		o the depth	needed to docu			nfirm the at	sence of indicators.	
Depth	Matrix	0/	Calas (maist)	Redox Fea	The state of the s	Loc ²	Tardina	Domesto
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc	Texture	Remarks
0-18	751R2.5/2	100				-	Silo	
18-22	7.5;R3/2	60			_	-	C151 L0)	moist
	1) 2.5/2.	30	_		-	-	CI si Lo L	mix w/
-	11 4/6	16					cleilos	charceal
Marine Control	10	10					113100)	Chicari
-		-			-			

¹Type: C=Co	oncentration, D=Depl	etion, RM=F	Reduced Matrix, C	S=Covered	or Coated Sa	nd Grains.	² Location: PL=Pore	Lining, M=Matrix.
Hudria Sail	Indicators: (Applic	able to all I	DDe unless oth	onvice note	4)	India	actors for Droblemeti	a Uudeia Cailai.
	Indicators: (Applic	able to all t			a.)		cators for Problemati	c nyaric sous":
Histosol	(A1) pipedon (A2)	-	Sandy Redox (Stripped Matrix			AND ADDRESS OF THE PARTY OF THE	2 cm Muck (A10) Red Parent Material (T	E2\
	istic (A3)		Loamy Mucky I		except MLR		ery Shallow Dark Sur	
The state of the s	en Sulfide (A4)		Loamy Gleyed		(oxoopt man		Other (Explain in Rema	
Deplete	d Below Dark Surface	e (A11)	Depleted Matri	x (F3)			,	
	ark Surface (A12)	-	Redox Dark Su				Indicators of hydrophy	
	Mucky Mineral (S1)		Depleted Dark				vetland hydrology mus	
Sandy G	Sleyed Matrix (S4)		Redox Depress	sions (F8)	T	L	inless disturbed or pro	blematic
Restrictive La	yer (if present):							
Type:					Hydric So	il Present?	Yes	No V
Depth (inch					1.19			
5		1		1/1	- 21	1		
Williams. Ur	ndisturbe	Ar	69	4/6-	21pix 6	ed st	ate	
	1011 01	0 1 10		. 0				
HYDROLOG	Υ							
	ology Indicators:							
Primary Indicat	ors (minimum of one	required; cl			201		dary Indicators (2 or m	
Surface Wa	tor (A1)				B9) (except		ater-Stained Leaves (E	9) (MLRA 1, 2,
High Water			Salt Crust (4A, and 4B)		, and 4B) ainage Patterns (B10)	
Saturation (memory.	ertebrates (B	(13)		y-Season Water Table	(C2)
Water Mark				Sulfide Odor			turation Visible on Aer	
			Oxidized RI	hizospheres	along Living			a magary (co)
	eposits (B2)		Roots (C3)			Ge	omorphic Position (D2	2)
Drift Depos	ts (B3)		Males and Australia and Austra	f Reduced In		Sh	allow Aquitard (D3)	
Algal Mat o	Cruet (BA)			Reduction in	n Tilled	CA	O N (D5)	
Algal Mat or	Clust (D4)		Soils (C6)	Stressed Pla	nto (D1)	FA	C-Neutral Test (D5)	
Iron Deposi	ts (B5)		(LRR A)	ollessed Fla	ins (D1)	Ra	ised Ant Mounds (D6)	/I DD A)
	Cracks (B6)			ain in Remar	ks)		st-Heave Hummocks	
	Visible on Aerial Imag	gery (B7)			/		ot Hours Hammoons	(51)
Sparsely Ve	egetated Concave Su	rface (B8)						
					-		The state of the s	
Field Observa	-							
Surface Water		No	Depth (inches	-				V
Water Table Pr Saturation Pres		No	_ Depth (inches):	Wet	land Hydrol	ogy Present? Yes	No
(includes capilla	The second second	No >	Depth (inches	1: 24				
	ed Data (stream gau				s inspections), if available	:	
			,		,	,		
Remarks:	comes 1	/	1 /1		10		1 1	TH
210	i inwater	over	land flou	s ceas	ed tr	om y	esterday	5")
In	flotiation	Mal	orf/2			,		
	- Indian	10176	1 1000					

Investigator(s): Landform (hillslope, terrace, etc.): Subregion (LRR): A Lat: Soil Map Unit Name: Are climatic / hydrologic conditions on the site typical of the conditions on the condi	Section, Tov Loca 45,472 for this time signific natural	State: WA wnship, Range al relief (concar 38 Long: Of year? Yes antly disturbed by problematic ing sampli	Sampling F O3, O ve, convex, nc 112.4190 NV No Are "Nor (If	Point:
Remarks: Tilled				
VEGETATION – Use scientific names of	plants.			
Tree Stratum (Plot size: 30'd.) 1. BCot fon (Patrix Ins. balsami fera) 2. 3. 4.	Absolute % Cover	Dominant Species?	Indicator Status FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: (A) (B)
		= Total Cove	er	Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 20'd.) 1. H. Black (Rubus discolor) 2. P. Black (Rubus discolor) 3. O. Gravel	30 15	Y	FACU FACU	Total % Cover of: Multiply by: OBL species x 1 = FACW species x 2 =
4	and the same of th	= Total Cove	er	FAC species
1. Un to grass (Agroshs -) 2. C. This the Circumationse	20 3 15	Y	FAC FACU	Column Totals: (A) (B) Prevalence Index = B/A =
3. Offace (Dancus carola). 4. Br. Fern (Pteridrum aquilinum) 5. 6. 7. 8. 9. 10.	10		FACU	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain)
<u>Woody Vine Stratum</u> (Plot size:) 1 2.		= Total Cove	er	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
% Bare Ground in Herb Stratum		= Total Cove	er	Hydrophytic Vegetation Present? Yes NoX
Remarks:				

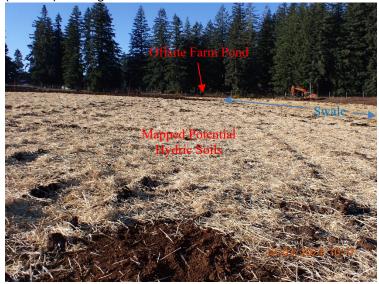
Color (moist)		Matrix	to the debe	needed to docum	Redox Feat		minim ure a	beence of marcators	•,
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, RS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, RS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, RS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, RS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, RS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, RS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, RS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, RS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion Matrix, RS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion Reduced Ry RS=Covered Nations (RS) Type: C=Concentration, D=Depletion Reduced Ry RS=Covered Nations (RS) Type: C=Concentration, D=Depletion Reduced Ry RS=Covered Or RS=Covered Nations (RS) Type: C=Concentration, D=Depletion Reduced Ry RS=Covered Nations (RS) Type: C=Concentration, D=Depletion RS=Covered Or RS=Covered Nations (RS) Type: C=Concentration, D=Depletion RS=Covered RS=C		NAME OF TAXABLE PARTY OF TAXABLE PARTY.	%				Loc ²	Texture	Remarks
Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. **Coation: PL=Pore Lining, M=Matrix Pydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histoscol (A1) Histoscol (A2) Histoscol (A2) Black Histic (A3) Hydrogen Sulfide (A4) Loarry Redox (S5) Histoscol (A1) Phydrogen Sulfide (A4) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Beyed Matrix (S2) Probabled Dark Surface (F6) Probabled Dark Surface (F7) Sandy Beyed Matrix (S4) Probabled Dark Surface (F6) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Probabled Dark Surface (A11) Probabled Dark Surface (F6) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Probabled Dark Surface (A11) Probabled Dark Surface (B9) (MLRA 1, 2, 4A, and 4B) Probabled Dark Surface (B9) Probab	7 :	Control or other transfer or the control of the con	100	_	-			5,10	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. **Location: PL=Pore Lining, M=Matrix Pydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histocol (A1) Histocol (A2) Black Histoc (A3) Histocol (A1) Sandy Redox (S5) Black Histoc (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Depleted Below Dark Surface (A12) Peopleted Below Dark Surface (A12) Peopleted Dark Surface (F7) Sandy Mucky Mineral (S1) Sandy Redox Deris Surface (F8) Sandy Mucky Mineral (S1) Sandy Gleyd Matrix (F3) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Sandy Gleyd Matrix (F3) Peopleted Dark Surface (F7) Sandy Gleyd Matrix (F3) Peopleted Dark Surface (F7) Sandy Gleyd Matrix (F3) Peopleted Dark Surface (F8) Sandy Gleyd Matrix (F3) Peopleted Dark Surface (F9) Sandy Gleyd Matrix (F3) Peopleted Dark Surface (F8) Sandy Gleyd Matrix (F3) Peopleted Dark Surface (F8) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Surface Water (A1) Aquatic invertebrates (B3) Drinage Patterns (B10) Surface Soil Cracks (B8) CLRR A) Other (Explain in Remarks) Drinage Patterns (B10) Drinage		10/11/5	100		-	Printed Spiriters discussions.		1 1	-
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. **Judric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Black Histor (A2) Histosol (A1) Sandy Redox (S5) Black Histor (A2) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (S6) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mudy Mineral (F1) (except MLRA 1) Thick Dark Surface (A12) Sandy Mudy Mineral (S1) Sandy Mudy Mineral (S1) Sandy Mudy Mineral (S1) Sandy Gleyed Matrix (S4) Redox Derpressions (F8) **Indicators of hydrophytic vegetation and water of the property of	- 1	7011-13	50		-		-	Annual Control of the	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. **Location: PL=Pore Lining, M=Matrix Hydric Soil Indicators: (Applicable to all LRRa, unless otherwise noted.) Histosol (A1) Histosol (A1) Histosol (A2) Shardy Redox (A2) Shardy Mudy Mineral (F1) (except MLRA 1) Thick Dark Surface (A2) Loarny Mucky Mineral (F2) Deplated Matrix (F2) Deplated Matrix (F2) Deplated Matrix (F2) Sandy Mudy Mineral (S1) Sandy Mudy Mineral (S1) Sandy Mudy Mineral (S1) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) Thick Dark Surface (A12) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain In Remarks) **Indicators of hydrophytic vegetation an wetland hydrology must be present, unless disturbed or problematic strictive Layer (If present): Type: Brook (G3) Present? Water -Stained Leaves (B9) (except MLRA 1, 2, 4, and 48) Salt Crust (B11) Salt Crust (B11) Deplated Dark Surface (B9) (except MLRA 1, 2, 4, and 48) Salt Crust (B11) Deplated Code (C1) Surface Water (A1) Hydric Soil Present? Yes No **Mother Stained Leaves (B9) (except MLRA 1, 2, 4, and 48) Water -Stained Leaves (B9) (MLRA 1, 2, 4, and 48) Salt Crust (B11) Drainage Patterns (B10) Surface Soil Cracks (B9) Fact-Neutral Test (D5) Surface Soil Cracks (B6) Track Order (Explain in Remarks) Track Water Present? Yes No Depth (inches): Wettand Hydrology Present? Yes No Depth (inches): Wettand Hydrology Present? Yes No Depth (inches): Wettand Hydrology Present? Yes No Depth (inches): Wettand Hydrology Present? Yes No Depth (inches): Wettand Hydrology Present? Yes No Depth (inches): Wettand Hydrology Present? Yes No Depth (inches): Wettand Hydrology Present? Yes No Depth (inches): Wettand Hydrology Present? Yes No Depth (inches): Wettand Hydrology Present? Yes N	_	7/4	50	-			-	0/5/10	
thydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histoscol (A2) Sandy Redox (S5) Shigped Matrix (S6) Black Histo (A3) Loamy Black Mistor (F1) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Sandy Matrix (F2) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Matrix (F3) Redox Dark Surface (F6) Sandy Mydy Mineral (S1) Sandy Mydrology must be present, unless disturbed or problematic strictive Layer (If present): Type: Britical Hydrology Indicators: Britical Rydrology Mydrology Mydrology must be present, unless disturbed or problematic strictive Layer (If present): Type: Britical Rydrology Mydrology m	-18 =	7.55R4/4	85	-	-	-	-	clsiLa	14
thydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histoscol (A2) Sandy Redox (S5) Shigped Matrix (S6) Black Histo (A3) Loamy Black Mistor (F1) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Sandy Matrix (F2) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Matrix (F3) Redox Dark Surface (F6) Sandy Mydy Mineral (S1) Sandy Mydrology must be present, unless disturbed or problematic strictive Layer (If present): Type: Britical Hydrology Indicators: Britical Rydrology Mydrology Mydrology must be present, unless disturbed or problematic strictive Layer (If present): Type: Britical Rydrology Mydrology m		4/0	15	-				EIS.I.	***************************************
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thydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histoscol (A2) Sandy Redox (S5) Shigped Matrix (S6) Black Histo (A3) Loamy Black Mistor (F1) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Sandy Matrix (F2) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Matrix (F3) Redox Dark Surface (F6) Sandy Mydy Mineral (S1) Sandy Mydrology must be present, unless disturbed or problematic strictive Layer (If present): Type: Britical Hydrology Indicators: Britical Rydrology Mydrology Mydrology must be present, unless disturbed or problematic strictive Layer (If present): Type: Britical Rydrology Mydrology m			*************		************	-		****	
thydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histoscol (A2) Sandy Redox (S5) Shigped Matrix (S6) Black Histo (A3) Loamy Black Mistor (F1) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Sandy Matrix (F2) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Matrix (F3) Redox Dark Surface (F6) Sandy Mydy Mineral (S1) Sandy Mydrology must be present, unless disturbed or problematic strictive Layer (If present): Type: Britical Hydrology Indicators: Britical Rydrology Mydrology Mydrology must be present, unless disturbed or problematic strictive Layer (If present): Type: Britical Rydrology Mydrology m	Ivma: C=Conc	entration D=Den	letion PM=6	Padurad Matrix CS	=Covered o	r Coated Sa	nd Graine	21 acction: DI -Pare	lining M-Matrix
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Trictive Layer (if present): Type: Depth (inches): Inks: Titled PROLOGY Iand Hydrology Indicators: Ianks: Inks: Titled Prosecution (As) Surface Water (A1) Iigh Water Table (A2) Saturation (A3) Saturation (A3) Saturation (A3) Saturation (A3) Sediment Deposits (B1) Oxidized Rhizospheres along Living Roots (C3) Presence of Reduced Iron (C4) Saturation (A3) Recent Iron Reduction in Tilled Solis (C6) Stunted or Stressed Plants (D1) Curriace Soli Cracks (B6) Other (Explain in Remarks) Depth (inches): Idd Observations: Inches Present? In	Histic Epipe Black Histic Hydrogen S Depleted B Thick Dark Sandy Muci	edon (A2) c (A3) Sulfide (A4) elow Dark Surfac Surface (A12) ky Mineral (S1)	e (A11)	Stripped Matrix (Loamy Mucky Mi Loamy Gleyed M Depleted Matrix Redox Dark Surf Depleted Dark S	S6) ineral (F1) (latrix (F2) (F3) face (F6) urface (F7)	except MLR	(A 1)	Red Parent Material (Very Shallow Dark Su Other (Explain in Rem Indicators of hydroph wetland hydrology mu	rface (TF12) narks) ytic vegetation and st be present,
Secondary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of one required; check all that apply) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Unimary (B1)		The same of the sa	Name of Street, or other Designation of the Owner, where the Owner, which is the O			1			
face Water Present? Yes No Depth (inches): ter Table Present? Yes No Depth (inches): uration Present? ludes capillary fringe) Yes No Depth (inches): wetland Hydrology Present? Yes No X inches inches inspections inspections inspections inspections in a variable:	arks /	1 1							
er Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Yes uration Present? Undes capillary fringe) Yes No Depth (inches): Wetland Hydrology Present? Yes No Yes No Yes Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	PROLOGY tland Hydrolog nary Indicators Surface Water High Water Tal Saturation (A3) Water Marks (E Sediment Deposits (I Algal Mat or Cr fron Deposits (I Surface Soil Cr nundation Visil Sparsely Veget	gy Indicators: (minimum of one (A1) ble (A2)) 31) posits (B2) B3) rust (B4) B5) racks (B6) ble on Aerial Imagiated Concave Su	gery (B7)	Water-Staine MLRA 1, 2, 4 Salt Crust (B' Aquatic Inver Hydrogen Su Oxidized Rhiz Roots (C3) Presence of F Recent Iron F Soils (C6) Stunted or St (LRR A)	A, and 4B) 11) tebrates (B1 ffide Odor ((zospheres a Reduced Iro Reduction in	13) C1) Islong Living on (C4) Tilled	W 44/ Dr Dr Dr St	ater-Stained Leaves (I A, and 4B) ainage Patterns (B10) y-Season Water Table aturation Visible on Ae ecomorphic Position (Di nallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6)	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9) 2)
uration Present? (udes capillary fringe) Yes No Depth (inches): 24 + (inches): vestalid Hydrology Present? Yes No	PROLOGY tland Hydrolog mary Indicators Surface Water High Water Tal Saturation (A3) Water Marks (E Sediment Deposits (I Algal Mat or Cr fron Deposits (I Surface Soil Cr inundation Visil Sparsely Veget d Observation	gy Indicators: (minimum of one (A1) ble (A2)) 31) posits (B2) B3) rust (B4) B5) racks (B6) ble on Aerial Imagiated Concave Su	gery (B7) Irface (B8)	Water-Staine MLRA 1, 2, 4 Salt Crust (B' Aquatic Inver Hydrogen Su Oxidized Rhiz Roots (C3) Presence of F Recent Iron F Soits (C6) Stunted or St (LRR A) Other (Explain	A, and 4B) 11) tebrates (B1 ffide Odor ((zospheres a Reduced Iro Reduction in	13) C1) Islong Living on (C4) Tilled	W 44/ Dr Dr Dr St	ater-Stained Leaves (I A, and 4B) ainage Patterns (B10) y-Season Water Table aturation Visible on Ae ecomorphic Position (Di nallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6)	B9) (MLRA 1, 2,) e (C2) rial Imagery (C9) 2)
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Appendix B

Representative Site Photographs



View looking north showing the graveled access road and swale (strawed) crossing the northwest corner of the site.



View looking west of strawed mapped potential hydric soil area and swale (both strawed), which is parallel to the western site boundary.



The offsite farm pond – fence is along the western site boundary.



The offsite farm pond.



Site Photographs



Pond overflow pipe draining at the west end of the onsite swale – view south.



View from the west site boundary northeastward along the swale.



Water ponded in the swale is ephemeral in nature – view northeast.



Transition between swale darker chroma 3 (upper left) and non-swale chroma 3 soil (lower right).



Site Photographs



Test hole DP15, which is the northernmost data point within the mapped potential hydric soil "thumb" – view southwest.



Soil color at DP15 was consistently 5YR 4/4 to 4/3 from surface to 24-in depth. No redoxymorphic features.



No water in DP15 at 24-in depth.



Test hole in non-swale area (DP-21), typical of test holes in all non-swale areas.



Site Photographs



Typical of chroma 3 soils found throughout the site.



View northeast of the mapped area of potentially hydric soils (strawed).



Current site conditions looking south toward upland area – swale is in the foreground.



Typical upland forest conditions found at the site.



Site Photographs



Off-site upland area east of the swale.



Project No.	
1972-24001-06	
Appendix	
Α	