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 OR attached to the complete signed cover form if report submitted electronically.

Contact and Authorization Information

☒ Applicant ☒ Owner Name, Firm and Address:
Ted Sester, T & K Sester Family, LLC
24200 SE Highway 212
Damascus, OR 97089

Business phone # (503) 663-4844
Mobile phone # (optional) (503) 351-8954
E-mail: ted@sesterfarms.com

☒ Authorized Legal Agent, Name and Address (if different):
Paul M Trone, EVREN Northwest, Inc.
PO Box 14488
Portland, Oregon 97293

Business phone # (503) 452-5561
Mobile phone # (optional) (503) 522-7880
E-mail: 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:** Ted Sester

Date: 12/10/2024 Special instructions regarding site access: ____

Project and Site Information

Project Name: Gramor Parcel

Latitude: 45.418659N Longitude: -122.418580E
decimal degree - centroid of site or start & end points of linear project

Proposed Use:
Low-level pesticide impacted topsoil imported from the Bull Run Filtration Facility will be blended with virgin topsoil at the site and used to cultivate rotational grass and nursery stock crops.

Tax Map # T2SR3E S03
Tax Lot(s) TL03302

Tax Map #
Tax Lot(s)

Project Street Address (or other descriptive location):
North side of Highway 212 approximately 1.75 miles east of Damascus, Oregon

Township 2S Range 3E Section 3 QQ SW/SE
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:
Rone Brewer
Sound Ecological Endeavors, LLC
19325 32nd Ave NW
Stanwood, WA 98292

Phone # (206) 595-7581
Mobile phone # (if applicable)
E-mail: rbrewer@soundeco.net

The information and conclusions on this form and in the attached report are true and correct to the best of my knowledge.

Consultant Signature: f2496cfa-c4ec-4bc6-9c5d-f191b672a443 Digitally signed by f2496cfa-c4ec-4bc6-9c5d-f191b672a443 Date: 2024.12.10 10:45:05 -08'00' Date: 12/10/2024

Primary Contact for report review and site access is ☐ Consultant ☒ Applicant/Owner ☒ Authorized Agent

Wetland/Waters Present? ☐ Yes ☒ No Study Area size: 29 acres Total Wetland Acreage:

Check Applicable Boxes Below

☐ R-F permit application submitted
☐ Mitigation bank site
☐ EFSC/ODOE Proj. Mgr: ____
☐ Wetland restoration/enhancement project (not mitigation)
☐ Previous delineation/application on parcel
If known, previous DSL # ____

☒ Fee payment submitted $ 100
☐ Resubmittal of rejected report ($100)
☐ Request for Reissuance. See eligibility criteria. (no fee)
DSL # ____ Expiration date____
☐ LWI shows wetlands or waters on parcel
Wetland ID code ____

For Office Use Only

DSL Reviewer: ____ Fee Paid Date: ____/____/____ DSL WD # ____

Date Delineation Received: ___/___/___ DSL App.# ____

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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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),[1] 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

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.

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. This 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”

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.

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
Ecologist/Ecological Risk Assessor, SEE

Paul M. Trone
Principal Geologist, ENW

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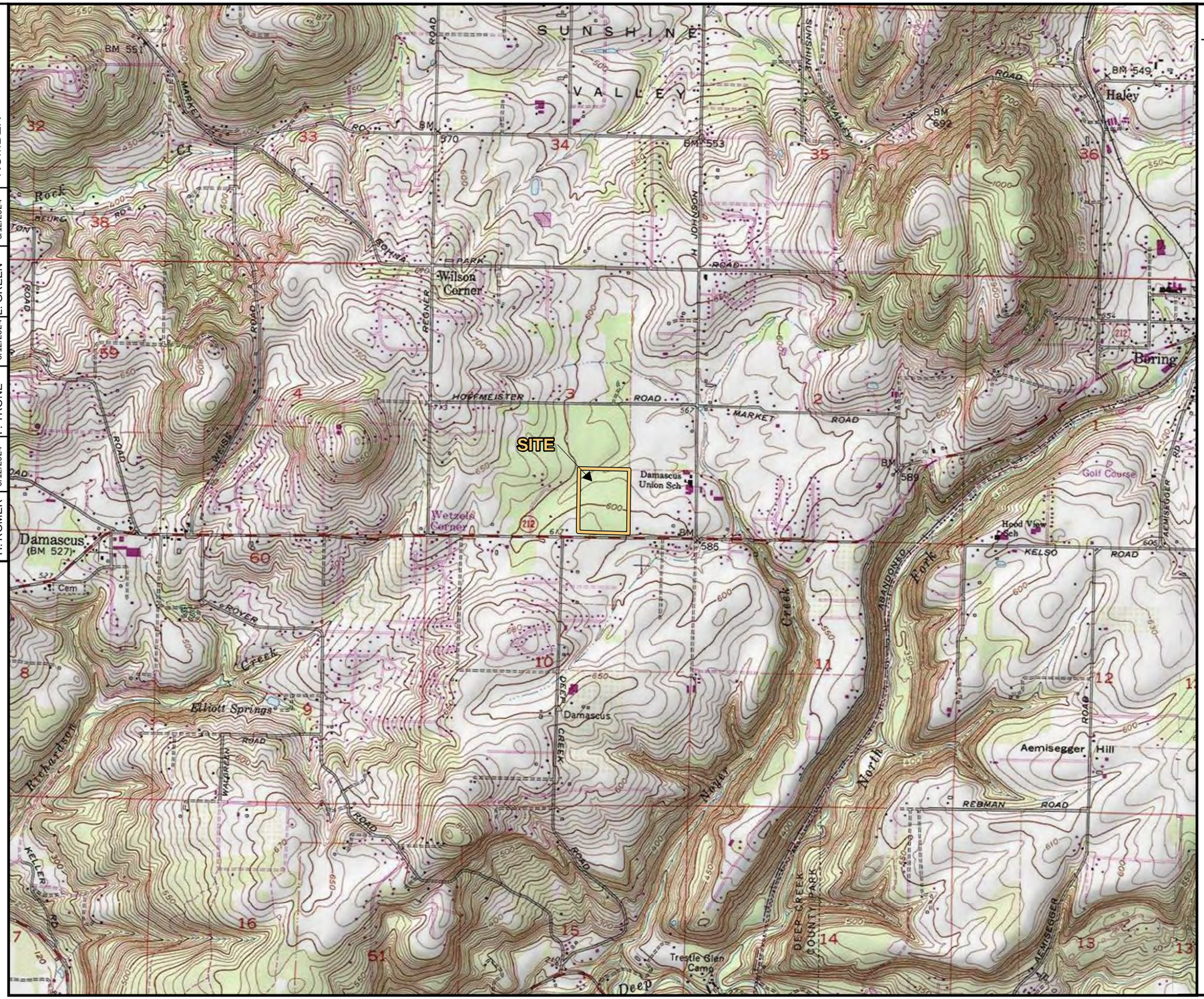
DRAWING NUMBER	1972-24001(V01)
APPROVED BY	L. GREEN 6/12/2024
CHECKED BY	P. TRONE 6/12/2024
DRAWN BY	H. ROMER 6/12/2024



LEGEND:

SUBJECT PROPERTY BOUNDARY

NOTES:

1. BASE MAP DEVELOPED BY THE USGS (DAMASCUS, 1:24000, 2013)

0 950 1,900 3,800

Feet

(APPROXIMATE 1" = 1900 FEET WHEN PRINTED 11x17)

N

EVREN NORTHWEST INC.
environmental natural resource consultants

FIGURE 1

SITE VICINITY MAP

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

DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
H. ROMER 6/12/2024	P. TRONE 6/12/2024	L. GREEN 6/12/2024	1972-24001(V01)

LEGEND:

- SUBJECT PROPERTY BOUNDARY
- EPHEMERAL DRAINAGE

NOTES:

1. BASE MAP DEVELOPED FROM AN AERIAL PHOTOGRAPH MAP DATED 2023 AND ENW FIELD NOTES.

2. ALL BUILDING, STREET, AND FEATURE LOCATIONS ARE APPROXIMATE.

3. SYMBOLS REPRESENT LOCATION AND DO NOT ALWAYS REPRESENT EXACT SHAPE, SIZE, OR ORIENTATION.

0 80 160 320

Feet

(APPROXIMATE 1" = 160 FEET WHEN PRINTED 11x17)

N

EVREN NORTHWEST INC.
environmental / natural resource consultants

FIGURE 2

SITE PLAN

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

DRAWING NUMBER	1972-24001(V03)
APPROVED BY	L. GREEN 12/2/2024
CHECKED BY	P. TRONE 12/2/2024
DRAWN BY	M. FERRY 12/2/2024

LEGEND:

- SUBJECT PROPERTY BOUNDARY
- GRAVEL FARM ROAD
- DELENA SILT LOAM
- SOIL PLACEMENT / AMENDMENT AREA
- 100 FOOT RIPARIAN BUFFER
- WATERWAY
- NO FILL WITHIN THIS AREA WITHOUT DSL APPROVAL

NOTES:

1. BASE MAP DEVELOPED FROM AN AERIAL PHOTOGRAPH MAP DATED 2023 AND ENW FIELD NOTES.
2. ALL BUILDING, STREET, AND FEATURE LOCATIONS ARE APPROXIMATE.
3. SYMBOLS REPRESENT LOCATION AND DO NOT ALWAYS REPRESENT EXACT SHAPE, SIZE, OR ORIENTATION.

0 70 140 280 Feet

(APPROXIMATE 1" = 140 FEET WHEN PRINTED 11x17)

N

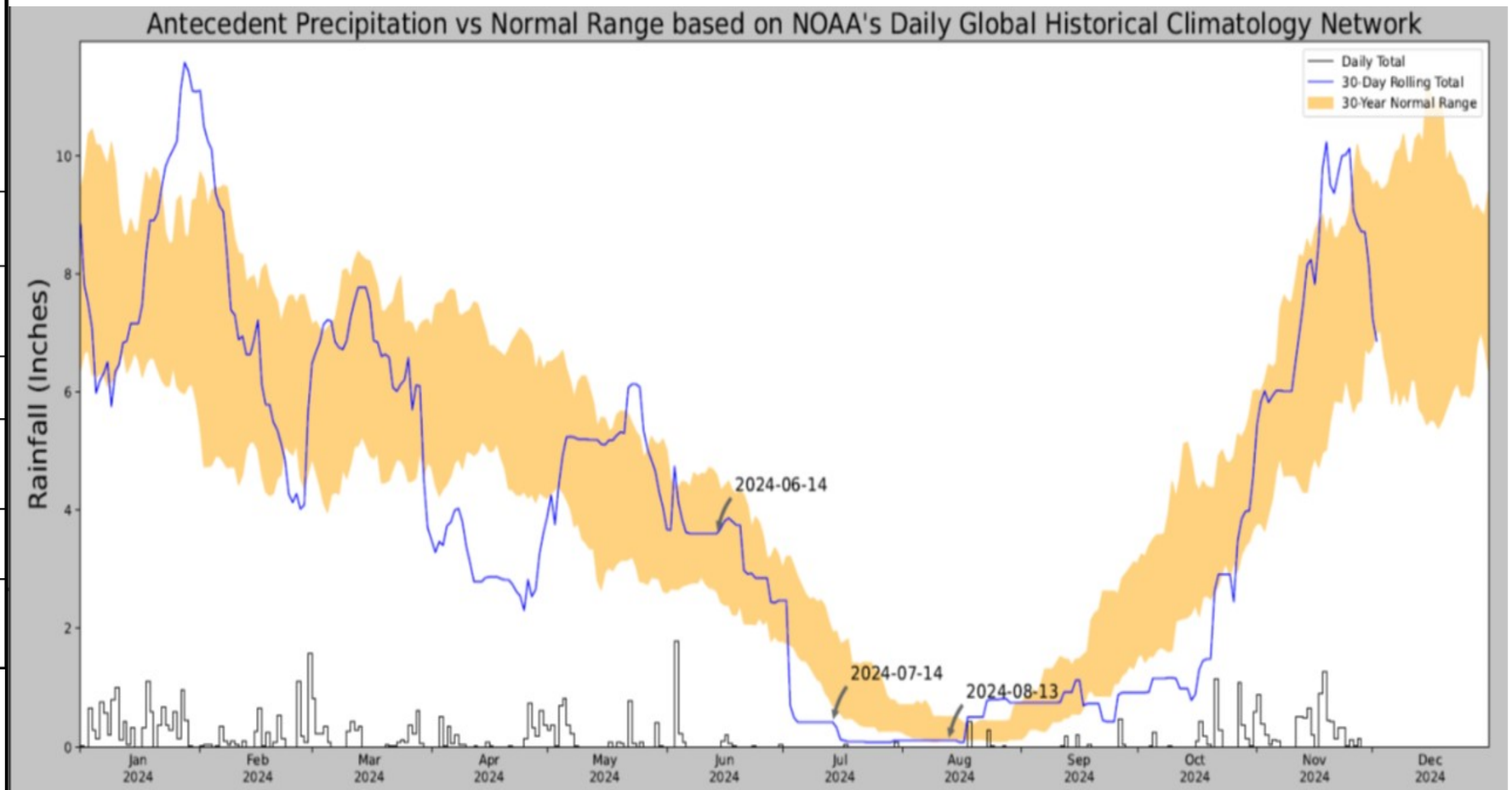
EVREN NORTHWEST INC.
environmental & natural resource consultants

FIGURE 3

TOPSOIL PLACEMENT PLAN

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

DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
M. FERRY 12/2/2024	P. TRONE 12/2/2024	L. GREEN 12/2/2024	1972-24001(V03)



Coordinates	45.420907, -122.420746
Observation Date	2024-08-13
Elevation (ft)	594.102
Drought Index (PDSI)	Mild drought
WebWIMP H_2O Balance	Dry Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-08-13	0.127559	0.503937	0.102362	Dry	1	3	3
2024-07-14	0.691339	1.935039	0.413386	Dry	1	2	2
2024-06-14	2.62874	4.59252	3.606299	Normal	2	1	2
Result							Drier than Normal - 7

US Army Corps of Engineers

ERDC

Figures and tables made by the Antecedent Precipitation Tool Version 2.0

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

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
ESTACADA 2 SE	45.2694, -122.3167	514.108	11.624	79.994	6.161	11166	90
ESTACADA 2.8 ESE	45.2794, -122.279	1179.134	1.959	665.026	2.184	28	0
ESTACADA 4.3 E	45.3041, -122.2463	1057.087	4.179	542.979	4.15	7	0
ESTACADA 5.2 WNW	45.3321, -122.425	334.974	6.817	179.134	4.289	74	0
EAGLE CREEK 9 SE	45.2761, -122.2019	925.853	5.601	411.745	4.827	73	0
BORING 1 E	45.4231, -122.3725	532.152	10.96	18.044	5.13	2	0
HEADWORKS PORTLAND WTR B	45.4486, -122.1547	748.032	14.668	233.924	10.032	2	0

LEGEND

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

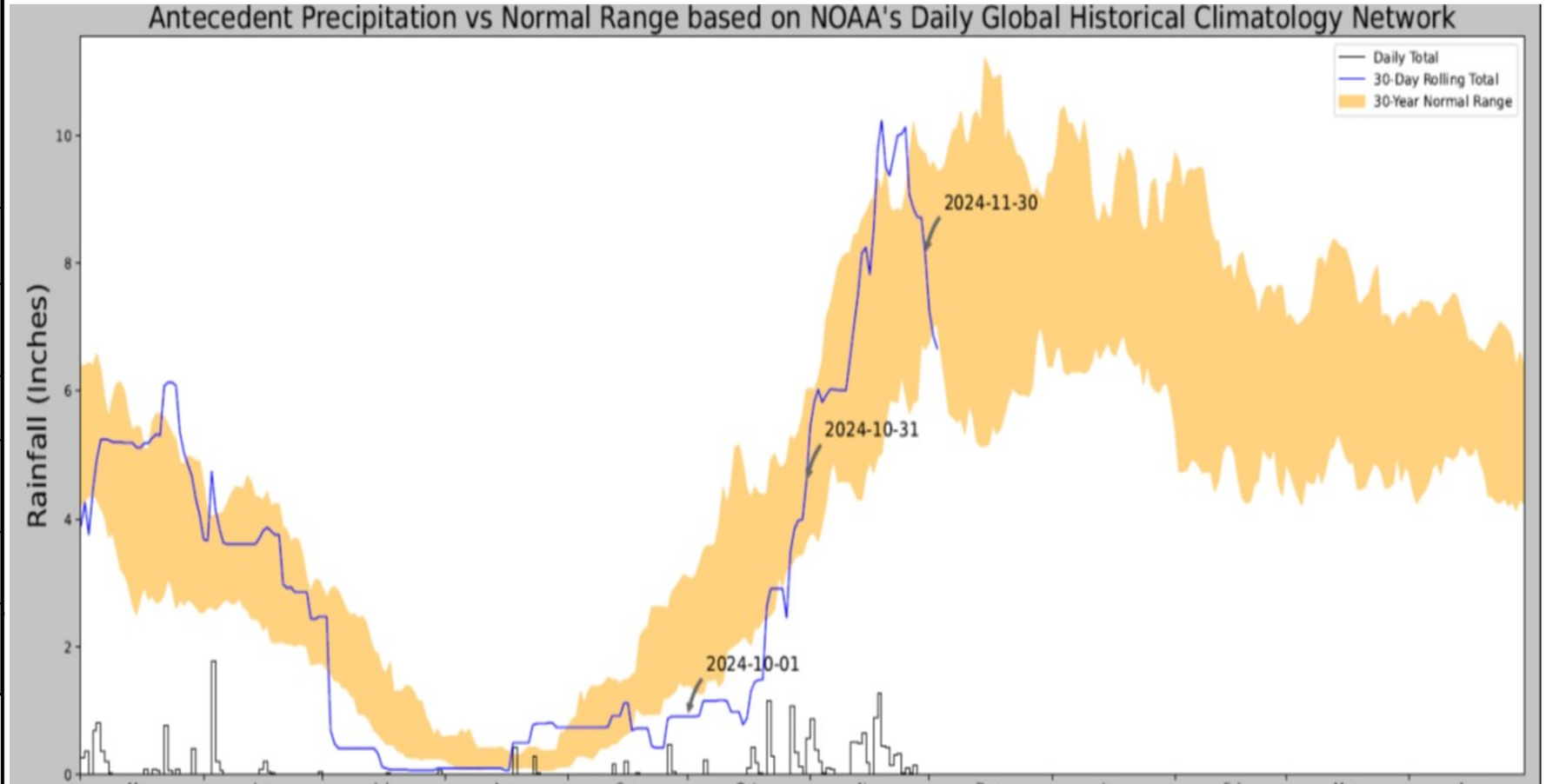
EVREN NORTHWEST INC.
environmental & natural resource consultants

FIGURE 4

AUGUST ANTECEDENT PRECIPITATION RESULTS

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

DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
M. FERRY 12/2/2024	P. TRONE 12/2/2024	L. GREEN 12/2/2024	1972-24001(V03)



Coordinates	45.421108, -122.420662
Observation Date	2024-11-30
Elevation (ft)	592.34
Drought Index (PDSI)	Mild drought (2024-10)
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-11-30	6.656693	9.71378	8.133859	Normal	2	3	6
2024-10-31	3.640551	6.021654	4.570866	Normal	2	2	4
2024-10-01	1.404331	3.099606	0.913386	Dry	1	1	1
Result							Normal Conditions - 11

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
ESTACADA 2 SE	45.2694, -122.3167	514.108	11.634	78.232	6.146	11157	87
ESTACADA 0.1 NW	45.2935, -122.3353	507.874	1.895	6.234	0.865	13	3
ESTACADA 2.8 ESE	45.2794, -122.279	1179.134	1.959	665.026	2.184	31	0
ESTACADA 4.3 E	45.3041, -122.2463	1057.087	4.179	542.979	4.15	7	0
ESTACADA 5.2 WNW	45.3321, -122.425	334.974	6.817	179.134	4.289	74	0
EAGLE CREEK 9 SE	45.2761, -122.2019	925.853	5.601	411.745	4.827	67	0
BORING 1 E	45.4231, -122.3725	532.152	10.96	18.044	5.13	2	0
HEADWORKS PORTLAND WTR B	45.4486, -122.1547	748.032	14.668	233.924	10.032	2	0

US Army Corps of Engineers

ERDC

Figures and tables made by the Antecedent Precipitation Tool Version 2.0

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

LEGEND

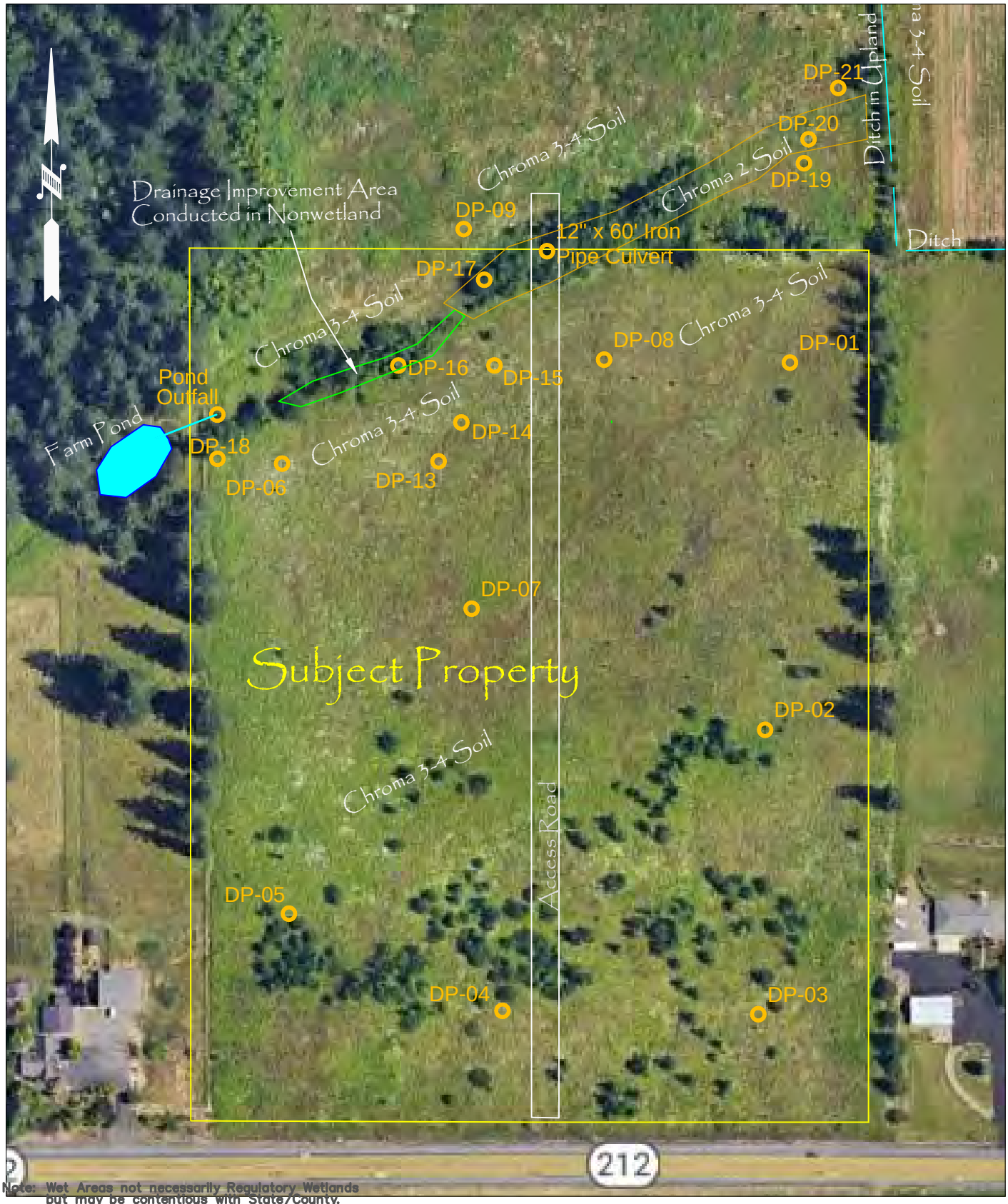
September (Dry),
October (Normal), and
November (Normal)
Precipitation Compared to Norms

EVREN NORTHWEST INC.
environmental & natural resource consultants

FIGURE 5

DECEMBER ANTECEDENT PRECIPITATION RESULTS

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



Scale: 1 inch = 200 ft	Data Plots and Hydrology Gramor Property Highway 212; Clackamas County, OR 45.42000°N; −122.42080°E	Figure 6

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

Appendix A

Corps Routine Wetland Delineation Data Forms

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

Project/Site: Sester City/County: Clackamas Sampling Date: 08/13/2024
Applicant/Owner: Sester Farms State: WA Sampling Point: DP-01
Investigator(s): R. Brewer Section, Township, Range: 03, 02S, 03E wm
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR): A Lat: 45.42107 Long: -122.41931 Datum: WGS84
Soil Map Unit Name: Barnstedt NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)
Are Vegetation X, Soil ___, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___
Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes ___ No X
Hydric Soil Present? Yes ___ No X
Wetland Hydrology Present? Yes ___ No X

Is the Sampled Area within a Wetland? Yes ___ No X

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' d.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 20' d.)			
1. Willow (Salix scouleriana)	15	Y	FAC
2. Cut. Black (Rubus laciniatus)	15	Y	FACU
3. H. Black (Rubus armeniacus)	10	N	FAC
4.			
5.			
	40	= Total Cover	

Herb Stratum (Plot size: 10' d.)			
1. QA's Lace (Daucus carota)	15	Y	FACU
2. Goldenrod (Solidago sp)	15	Y	FACU
3. E Black (Rubus laciniatus)	10	Y	FACU
4. Orchard (Anthoxanthum odoratum)	40	Y	FACU
5. Millet (Piptatherum miliaceum)	5	N	NI
6. H. Black (Rubus discolor)	10	N	FAC
7. Hawkbit (Leontodon saxatilis)	5	N	FACU
8. Soft Rush (Juncus effusus)	2	N	FACW
9.			
10.			
11.			
	102	= Total Cover	

Woody Vine Stratum (Plot size: ___)		
1.		
2.		
	= Total Cover	

% Bare Ground in Herb Stratum ___

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 6 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 17 (A/B)

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)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ___ No X

Remarks: Logged/filled/mowed

SOIL

Sampling Point: Sester DP01

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-6	5YR 3/3	100					Si Lo	
6-10	7.5YR 3/4	95	4/6	3+	?	M	Si Lo	
10-12	" "	90	4/6	3	?	M	Si Lo	
			4/3	5	?	M	Si Lo	
12-18+	7.5YR 3/4	80	4/6	8	?	M	Cl Si	
			7.5YR 4/3	10	?	M	Cl Si	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: Chroma too high

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): 24+

Wetland Hydrology Present? Yes ___ No X

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

Remarks:

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

Project/Site: Sester/Gramor City/County: Clackamas Sampling Date: 08/13/2024
Applicant/Owner: Sester Farms State: WA Sampling Point: Sester DP02
Investigator(s): B. Brewer Section, Township, Range: 03, 02S, 03E WM
Landform (hillslope, terrace, etc.): Terrace/Plain Local relief (concave, convex, none): Concave Slope (%): 2+N
Subregion (LRR): A Lat: 45.41962 Long: -122.41943 Datum: WGS84
Soil Map Unit Name: Bornstedt NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)
Are Vegetation X, Soil ___, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___
Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes ___ No X
Hydric Soil Present? Yes ___ No X
Wetland Hydrology Present? Yes ___ No X

Is the Sampled Area within a Wetland? Yes ___ No ___

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' d.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 20' d.)	Absolute % Cover	Dominant Species?	Indicator Status
1. Hazelnut	2	N	N
2. Willow (S. Scouleriana)	2	N	FAC
3. H. Blackberry (Rubus discolor)	40	Y	FAC
4. E. Blackberry (Rubus laciniatus)	5	Y	FACU
5.			
	49 = Total Cover		

Herb Stratum (Plot size: 10' d.)	Absolute % Cover	Dominant Species?	Indicator Status
1. Vernal Grass (A. odoratum)	20	Y	FACU
2. C. Thistle (Cirsium arvense)	3	N	FAC
3. Goldenrod (Solidago sp.)	10	Y	FACU
4. QA Lace (D. carota)	5	Y	FACU
5. T. Blackberry (R. ursinus)	3	N	FACU
6. Hawkbit (L. saxatilis)	15	Y	FACU
7.			
8.			
9.			
10.			
11.			
	56 = Total Cover		

Woody Vine Stratum (Plot size: ___)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum ___

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 6 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 17 (A/B)

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)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ___ No X

Remarks:

SOIL

Sampling Point: Sester DP02

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-9	7.5YR 3/3	100					Si Lo	
9-18+	" "	85	4/6	3		M	Si Lo	
			3/2	7		MIX	Si Lo	
			4/3	3+		MIX	Si Lo	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: High Chroma

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): 24+

Wetland Hydrology Present? Yes ___ No X

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

Remarks:

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

Project/Site: Sester/Gramor City/County: Clackamas Sampling Date: 08/13/2024
Applicant/Owner: Sester Farms State: WA Sampling Point: DP-03
Investigator(s): A. Brower Section, Township, Range: 03, 02S, 03E WM
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Slope Slope (%): 2→5
Subregion (LRR): A Lat: 45.41849 Long: -122.41948 Datum: WGS84
Soil Map Unit Name: Bornsledt NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)
Are Vegetation X , Soil ___ , or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___
Are Vegetation ___ , Soil ___ , or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ___	No X	**Is the Sampled Area within a Wetland?** Yes ___ No ___
Hydric Soil Present?	Yes ___	No X	
Wetland Hydrology Present?	Yes ___	No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' d.)	Absolute % Cover	Dominant Species?	Indicator Status
1. Willow (S. scouleriana)	3	N	FAC
2. B. Cottonwood (P. Angustifolia)	3	N	FACW
3.			
4. Douglas fir nearby			
	6	= Total Cover	

Sapling/Shrub Stratum (Plot size: 20' d.)	Absolute % Cover	Dominant Species?	Indicator Status
1. H. Black (R. discolor)	55	Y	FAC
2. Snowberry (S. albus)	5	N	FACU
3.			
4.			
5.			
	60	= Total Cover	

Herb Stratum (Plot size: 10' d.)	Absolute % Cover	Dominant Species?	Indicator Status
1. Vernal Grass	30	Y	FACU
2. Orchard	10	Y	FACU
3. T. Black	3	N	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	43	= Total Cover	

Woody Vine Stratum (Plot size: ___)		
1.		
2.		
	___	= Total Cover

% Bare Ground in Herb Stratum ___

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

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)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ___ No X

Remarks: Logged/cleared / mowed

SOIL

Sampling Point: Sester DP03

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-12	7.5YR 3/3	100	-	-	-	-	SiLo	Fired Peds

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: In burned area, High Chroma

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): 24+

Wetland Hydrology Present? Yes ___ No X

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

Remarks:

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

Project/Site: Sester/Gramer City/County: Clackamas Sampling Date: 08/13/2024
Applicant/Owner: Sester Farms State: WA Sampling Point: DP.04
Investigator(s): R. Brewer Section, Township, Range: 03, 02S, 03E
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): - Slope (%): 1-7->5
Subregion (LRR): A Lat: 45.41850 Long: -122.42091 Datum: WGS84
Soil Map Unit Name: Bornstedt NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)
Are Vegetation X, Soil ___, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___
Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' d.)	Absolute % Cover	Dominant Species?	Indicator Status
1. Willow nearby	20	Y	FAC
2. Cottonwood nearby	15	Y	FAC
3.			
4.			
	35	= Total Cover	

Sapling/Shrub Stratum (Plot size: 20' d.)			
1. Hf Black (R. discolor)	50	Y	FAC
2.			
3.			
4.			
5.			
	50	= Total Cover	

Herb Stratum (Plot size: 10' d.)			
1. Vernal Gr (A. odoratum)	30	Y	FACU
2. C. Thistle (C. arvense)	15	Y	FAC
3. T. Black (R. ursinus)	5	N	FACU
4. millet (P. miliaceum)	3	N	NI
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	53	= Total Cover	

Woody Vine Stratum (Plot size: ___)		
1.		
2.		
	___	= Total Cover

% Bare Ground in Herb Stratum ___

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)
Total Number of Dominant Species Across All Strata: 5 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 80 (A/B)

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)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ___ No X

Remarks: No obligate - requires soil/Hydrology → No

SOIL

Sampling Point: Sester DP04

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	7.5YR 2.5/3	98	4/6	<2	?	M	Si Lo	
6-8	" " 3/3	95	4/6	3+	?	M	Si Lo	
8-12	" " "	98	4/6	<2	?	M	Si Lo	
12-18	" " "	90	4/6	3	?	M	Si Lo	
			4/3	5	?	M	Si Lo	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: High chroma

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): 24"

Wetland Hydrology Present? Yes ___ No X

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

Remarks:

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

Project/Site: Sester/Gramor City/County: Clackamas Sampling Date: 08/13/2024
Applicant/Owner: Sester Farms State: WA Sampling Point: DP-05
Investigator(s): R Bower Section, Township, Range: 03, 02S, 03E WM
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Cave Slope (%): —
Subregion (LRR): A Lat: 45.41088 Long: -122.42214 Datum: WGS84
Soil Map Unit Name: Borosedt NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)
Are Vegetation X, Soil ___, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___
Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' d.)	Absolute % Cover	Dominant Species?	Indicator Status
1. Willow (S. scouleriana)	30	Y	FAC
2. B Cottonwood (P. balsamifera)	20	Y	FAC
3.			
4.			
	50	= Total Cover	

Sapling/Shrub Stratum (Plot size: 20' d.)			
1. H. Bhck (R discolor)	40	Y	FAC
2. E. Black (R laciniatus)	10	Y	FACU
3.			
4.			
5.			
	50	= Total Cover	

Herb Stratum (Plot size: 10' d.)			
1. millet (P. miliaceum)	10	Y	FACU
2. Velvetgr ( )	10	Y	FAC
3. Goldenrod (Sol. sp.)	3	N	FACU
4. Vernal (A. odoratum)	2	N	FACU
5. Dewey Sedge (C. deweyana)	2	N	FAC
6. T. Black (R. ursinus)	20	Y	FACU
7.			
8.			
9.			
10.			
11.			
	47	= Total Cover	

Woody Vine Stratum (Plot size: ___)		
1.		
2.		
	___	= Total Cover

% Bare Ground in Herb Stratum 20+

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)
Total Number of Dominant Species Across All Strata: 7 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 57 (A/B)

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)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ___ No X

Remarks: No obligates → Requires soil + hydrology → No

SOIL

Sampling Point: Sester DP05

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-15	7.5YR 3/3	100	—	—	—	—	SiLo	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: High Chroma

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): 24+

Wetland Hydrology Present? Yes ___ No X

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

Remarks:

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

Project/Site: Sester / Gramor City/County: Clackamas Sampling Date: 08/13/2024
Applicant/Owner: Sester Farms State: WA Sampling Point: DP-06
Investigator(s): R. Brewer Section, Township, Range: 03, 02S, 03E WM
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): slope Slope (%): 4
Subregion (LRR): A Lat: 45.42069 Long: -122.42223 Datum: WGS84
Soil Map Unit Name: Bornstedt NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)
Are Vegetation X, Soil ___, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___
Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' d.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 20' d.)	Absolute % Cover	Dominant Species?	Indicator Status
1. P. Ninebark (P. capitatus)	1	N	FACU
2. H. Black (R. discolor)	70	Y	FAC
3. E. Black (R. laciniatus)	10	N	FACU
4.			
5.			
	81 = Total Cover		

Herb Stratum (Plot size: 10' d.)	Absolute % Cover	Dominant Species?	Indicator Status
1. Goldenrod	35	Y	FACU
2. B. Fern (Pt. aquilinum)	25	Y	FACU
3. C. Thistle (C. arvense)	10	N	FAC
4. Garlace (A. cordata)	10	N	FACU
5. Oxeye Daisy (H. helianthoides)	15	N	FACU
6. O. Grape (M. aquafolium)	5	N	FACU
7.			
8.			
9.			
10.			
11.			
	100 = Total Cover		

Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum ___

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

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)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ___ No X

Remarks:

SOIL

Sampling Point: Sester DP06

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-6	7.5YR 2.5/3	100	-	-	-	-	Silo	
6-8	" " 3/3	98	4/6	2			Silo	
8-10	7.5YR 3/2	85	7.5YR 4/4	15	MIX		Silo	
10-18	7.5YR 3/3	85	4/6	5	C?	M	Silo	
	4/4	10					Silo	
18+	10YR 4/4	85	4/6	5	C	M	CL SL	
	3/3	5	5/2	5	D	M	CL SL	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: High chroma

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): 24

Wetland Hydrology Present? Yes ___ No X

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

Remarks:

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

Project/Site: Sester/Gramor City/County: Clackamas Sampling Date: 08/13/2024
Applicant/Owner: Sester Farms State: WA Sampling Point: DP07
Investigator(s): R. Brower Section, Township, Range:
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Slope Slope (%): 4
Subregion (LRR): A Lat: 45.472010 Long: -122.42112 Datum: WGS84
Soil Map Unit Name: Bornstedt NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)
Are Vegetation X, Soil ___, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___
Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ___	No X	**Is the Sampled Area within a Wetland?** Yes ___ No X
Hydric Soil Present?	Yes ___	No X	
Wetland Hydrology Present?	Yes ___	No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' d.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 20' d.)	Absolute % Cover	Dominant Species?	Indicator Status
1. H. Black CR. (R. discolor)	40	Y	FAC
2. E. Black (R. laciniatus)	10	Y	FACU
3.			
4.			
5.			
	50 = Total Cover		

Herb Stratum (Plot size: 10' d.)	Absolute % Cover	Dominant Species?	Indicator Status
1. Vernal (A. odoratum)	50	Y	FACU
2. Orchard (D. Carota)	5	N	FACU
3. Goldenrod (Sol. sp)	5	N	FACU
4. Ragwort (Senecio vulgaris)	2	N	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	62 = Total Cover		

Woody Vine Stratum (Plot size: ___)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum ___

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

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)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ___ No X

Remarks: Logged/tilled) mowed

SOIL

Sampling Point: Sester DP07

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-5	7.5YR 2.5/2	100	-	-	-	-	SiLo	
5-11	7.5YR 2.5/3	90	4/6	10		M	SiLo	Hard
11-12	Fired Ped		w/ charcoal					
12+	3/3	90	4/6	10			Cl Si	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: High Chroma, fire pit area

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): 24

Wetland Hydrology Present? Yes ___ No X

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

Remarks:

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

Project/Site: Sester / Gramor City/County: Clackamas Sampling Date: 08/13/2024
Applicant/Owner: Sester Farms State: WA Sampling Point: DP-08
Investigator(s): R. Brewer Section, Township, Range: 03, 02S, 03E WM
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): slope Slope (%): 2-3
Subregion (LRR): A Lat: 45.42112 Long: -122.42037 Datum: WGS84
Soil Map Unit Name: Bornstedt / Dalena NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)
Are Vegetation X, Soil ___, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___
Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ___	No X	**Is the Sampled Area within a Wetland?** Yes ___ No X
Hydric Soil Present?	Yes ___	No X	
Wetland Hydrology Present?	Yes ___	No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' d.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 20' d.)			
1. A. Black (R. discolor)	45	Y	FAC
2. Ninebark (P. Capitatus)	2	N	FACW
3. E. Black (R. laciniatus)	10	Y	FACU
4.			
5.			
	57 = Total Cover		
Herb Stratum (Plot size: 10' d.)			
1. Vernal (A. odoratum)	25	Y	FACU
2. Br fern (Pt. aquilinum)	15	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	40 = Total Cover		
Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum ___

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 4 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 25 (A/B)

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)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ___ No X

Remarks: Oriental Spruce? 2%
Nutgrass/Sedge? 2% – Flat sedge cyperus conglomeratus

Sampling Point: Sester DP08

SOIL

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-2	7.5YR 2.5/2	100	-	-	-	-	Si Lo	old duff?
2-10	7.5YR 3/3 +	90	4/6	8		M	Si Lo	fired Ped
10-18+	5YR 4/6	100	-	-	-	-	Cl Si	charcoal

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: High Chroma / Fired Ped

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): 24+

Wetland Hydrology Present? Yes ___ No X

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

Remarks:

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

Project/Site: Sester City/County: Clackamas Sampling Date: 12/3/2024
Applicant/Owner: Sester Farms State: WA Sampling Point: DP-12
Investigator(s): Paul Trone / R. Brewer Section, Township, Range: 03, 02S, 03E WM
Landform (hillslope, terrace, etc.): Terrace/Plain Local relief (concave, convex, none): Slope Slope (%): 4
Subregion (LRR): A Lat: 45.42070 Long: -122.42133 Datum: WGS84
Soil Map Unit Name: Delena NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)
Are Vegetation X, Soil X, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___
Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes ___ No X
Hydric Soil Present? Yes ___ No X
Wetland Hydrology Present? Yes ___ No X

Is the Sampled Area within a Wetland? Yes ___ No X

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' d.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 20' d.)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		

Herb Stratum (Plot size: 10' d.)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	= Total Cover		

Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum ___

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)

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)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ___ No X

Remarks: Tilled - based on soils + hydrology + past data

SOIL

Sampling Point: DP-13

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-6	2.5YR 4/6	100					Silo	Fired Red
6-12	5YR 4/3	100					Silo	
12-18	5YR 4/3	100					Silo	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: High Chroma

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): 18+

Wetland Hydrology Present? Yes ___ No X

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

Remarks:

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

Project/Site: Sesler City/County: Clackamas Sampling Date: 12/3/2024
Applicant/Owner: Sesler Farms State: WA Sampling Point: DP-14
Investigator(s): P. Stone / R Bauer Section, Township, Range: 03, 02S, 03E WM
Landform (hillslope, terrace, etc.): Terrace/Plain Local relief (concave, convex, none): Slope Slope (%): 4
Subregion (LRR): A Lat: 45.42085 Long: -122.47122 Datum: WGS84
Soil Map Unit Name: Delena NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)
Are Vegetation X, Soil X, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___
Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ___	No X	**Is the Sampled Area within a Wetland?** Yes ___ No X
Hydric Soil Present?	Yes ___	No X	
Wetland Hydrology Present?	Yes ___	No X	

Remarks:

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30' d.)			
1.			
2.			
3.			
4.			
	___ = Total Cover		
Sapling/Shrub Stratum (Plot size: 20' d.)			
1.			
2.			
3.			
4.			
5.			
	___ = Total Cover		
Herb Stratum (Plot size: 10' d.)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	___ = Total Cover		
Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	___ = Total Cover		

% Bare Ground in Herb Stratum ___

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)

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)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ___ No X

Remarks: Tilled. based on soils + hydrology → previous site data

SOIL

Sampling Point: DP-14

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-6	5YR 4/6	100					Cl Lo	
6-12	5YR 4/4	100					Cl Lo	
12-18	5YR 4/4	100					Si Lo	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: High Chroma

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): 10-11

Wetland Hydrology Present? Yes ___ No X

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

Remarks:

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

Project/Site: Sester City/County: Clackamas Sampling Date: 12/3/2024
Applicant/Owner: Sester Farms State: WA Sampling Point: DP-15
Investigator(s): P. Trane / R. Brewer Section, Township, Range: 03, 025, 03E WM
Landform (hillslope, terrace, etc.): Terr/Plain Local relief (concave, convex, none): Slope Slope (%): 4
Subregion (LRR): A Lat: 45.42105 Long: -122.42108 Datum: WGS84
Soil Map Unit Name: Delena NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)
Are Vegetation X, Soil X, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___
Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ___	No X	**Is the Sampled Area within a Wetland?** Yes ___ No ___
Hydric Soil Present?	Yes ___	No X	
Wetland Hydrology Present?	Yes ___	No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' d.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	___ = Total Cover		

Sapling/Shrub Stratum (Plot size: 20' d.)			
1.			
2.			
3.			
4.			
5.			
	___ = Total Cover		

Herb Stratum (Plot size: 10' d.)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	___ = Total Cover		

Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	___ = Total Cover		

% Bare Ground in Herb Stratum ___

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)

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)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ___ No X

Remarks: Filled - based on soils + hydrology - previous data

SOIL

Sampling Point: DP-15

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-6	5YR4/4	100					Cl Lo	
6-12	5YR4/4	100					Si Cl Lo	
12-18	5YR4/4	100					Si Lo	
18-24	5YR4/3	100					Si Lo	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: High Chroma

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): 24"

Wetland Hydrology Present? Yes ___ No X

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

Remarks:

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

Project/Site: Sesler Gramor City/County: Clackamas Sampling Date: Dec 5 & 6, 2024
Applicant/Owner: Sesler Farms State: WA Sampling Point: DP 16
Investigator(s): K Brewer Section, Township, Range: 03, 02S, 03E
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): swale Slope (%): 1
Subregion (LRR): A Lat: 45.42117 Long: -122.4247 Datum: WGS84
Soil Map Unit Name: Delena NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ___ (If no, explain in Remarks.)
Are Vegetation X, Soil X, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes ___ No X
Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ✓	No ___	**Is the Sampled Area within a Wetland?** Yes X No ___ See notes
Hydric Soil Present?	Yes X	No ___	
Wetland Hydrology Present?	Yes X	No ___	

Remarks: in area of non-hydric soil removal - created wetland may not have been hydric originally conditions

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' d.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	___ = Total Cover		
Sapling/Shrub Stratum (Plot size: 20' d.)			
1.			
2.			
3.			
4.			
5.			
	___ = Total Cover		
Herb Stratum (Plot size: 10' d.)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	___ = Total Cover		
Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	___ = Total Cover		

% Bare Ground in Herb Stratum ___

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)

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)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ___

Remarks: non-hydric surface soil removed
Subsurface soil appears hydric - water @ 4" bgs
If veg growing in this soil → would be hydrophytic

SOIL

Sampling Point: DP 16

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-12	7.5YR 4/3	80	7.5YR 5/4	2		M	cl si Lo	MIX
	5/3	15+	4/4	3	-	-	cl si Lo	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks: Formerly below surface per DPs 20, 19, + 17. Surface soil removed

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 4

Wetland Hydrology Present? Yes X No ___

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

Remarks: Formerly below surface surface soil not hydric → depends on original depth

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

Project/Site: Sester-Gramar City/County: Clackamas Sampling Date: Dec 5-6, 2024
Applicant/Owner: Sester Farms State: WA Sampling Point: DP17
Investigator(s): R. Brewer Section, Township, Range: 03 02S 03E
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): swale Slope (%): 2
Subregion (LRR): A Lat: 45.42139 Long: -122.42122 Datum: WGS84
Soil Map Unit Name: Delena (Not?) NWI classification: —
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)
Are Vegetation X, Soil ___, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___
Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ___	No X	**Is the Sampled Area within a Wetland?** Yes ___ No X
Hydric Soil Present?	Yes ___	No X	
Wetland Hydrology Present?	Yes ___	No X	

Remarks: Tilled

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' d.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 20' d.)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		

Herb Stratum (Plot size: 10' d.)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	= Total Cover		

Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum ___

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)

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)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ___ No X

Remarks: Tilled No soil – No hydrology ⇒ no veg

SOIL

Sampling Point: DP17

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-15	7.5YR 2.5/2	100	-	-	-	-	SiLo	
15-20+	7.5YR 4/3	85	7.5YR 5/2	15	?	-	Cl SiLo	
	5/3	10	-	-	-	-	Cl SiLo	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: Tilled

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): 24+

Wetland Hydrology Present? Yes ___ No X

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

Remarks:

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

Project/Site: Sester-Gramer City/County: Clackamas Sampling Date: Dec 5 & 6, 2024
Applicant/Owner: Sester Farms State: WA Sampling Point: DP 18
Investigator(s): R. Brewer Section, Township, Range: 03 02S 03E
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Cave Slope (%): 1-2
Subregion (LRR): A Lat: 45. Long: -122. Datum: WGS84
Soil Map Unit Name: Delena NWI classification: —
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ___ No ___ (If no, explain in Remarks.)
Are Vegetation ___ , Soil ___ , or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes ___ No ___
Are Vegetation ___ , Soil ___ , or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ___	No ✓	**Is the Sampled Area within a Wetland?** Yes ___ No ✗
Hydric Soil Present?	Yes ___	No ✗	
Wetland Hydrology Present?	Yes ___	No ✗	

Remarks: Removed material

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' d.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	___ = Total Cover		
Sapling/Shrub Stratum (Plot size: 20' d.)			
1.			
2.			
3.			
4.			
5.			
	___ = Total Cover		
Herb Stratum (Plot size: 10' d.)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	___ = Total Cover		
Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	___ = Total Cover		

% Bare Ground in Herb Stratum ___

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)

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)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ___ No ✗

Remarks: tilled/moved soil – no veg.
Not hydric → no saturation → no hydrophytic

SOIL

Sampling Point: DP18

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-20	7.5YR 2.5/2	100	-	-	-	-	S.Lo	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: moved material - 24" Avg Depth. N50' x 33'! Not wetland soil

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): 20

Wetland Hydrology Present? Yes ___ No X

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

Remarks:

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

Project/Site: Sester-Gramor City/County: Clackamas Sampling Date: Dec 5+6, 2024
Applicant/Owner: Sester Farms State: WA Sampling Point: DP19
Investigator(s): R. Brewer Section, Township, Range: 03, 02S, 03E
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): — Slope (%): slope
Subregion (LRR): A Lat: 45.42203 Long: -122.41913 Datum: WGS84
Soil Map Unit Name: Delena (not?) NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)
Are Vegetation X, Soil ___, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___
Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ___	No X	**Is the Sampled Area within a Wetland?** Yes ___ No ___
Hydric Soil Present?	Yes ___	No X	
Wetland Hydrology Present?	Yes ___	No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' d.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 20' d.)			
1. H. Black (R. discolor)	30	Y	FAC
2. T. Black (R. Ursinus)	15	Y	FACU
3. E. Black (R. lacinatus)	10	Y	FACU
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 10' d.)			
1. CAlacel	20	Y	FACU
2. THairgrass (Deschampsia cespitosa)	30	Y	
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	= Total Cover		
Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum ___

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 5 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 20 (A/B)

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)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ___ No X

Remarks:

SOIL

Sampling Point: DP19

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-7	7.5YR 3/2	100	—	—	—	—	SiLo	
7-12	7.5YR 4/4	100	—	—	—	—	SiLo	
12-19	7.5YR 4/4	85	7.5YR 4/6	10	?	M	SiLo	
19-24	7.5YR 4/4	60	7.5YR 4/6	10	?	M	clSiLo	
	7.5YR 5/3	30					clSi	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: Features w/distinct boundaries - not redox - oxid. weathering

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): 24+

Wetland Hydrology Present? Yes ___ No X

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

Remarks:

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

Project/Site: Sester-Cramer City/County: Clackamas Sampling Date: Dec. 5th, 2024
Applicant/Owner: Sester Farms State: WA Sampling Point: DP20
Investigator(s): R. Brewer Section, Township, Range: 03, 02S, 03E
Landform (hillslope, terrace, etc.): Terrace/Plain Local relief (concave, convex, none): concave/swale Slope (%): 1
Subregion (LRR): A Lat: 45.42214 Long: -122.41908 Datum: WGS84
Soil Map Unit Name: Pelena (Max be?) NWI classification: —
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)
Are Vegetation X, Soil ___, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___
Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks: mowed/historically tilled

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' d.)	Absolute % Cover	Dominant Species?	Indicator Status
1. B. Cotton (Pop. balsamifera)	5	N	FAC
2.			
3.			
4.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 20' d.)			
1. H. Black	10	Y	FAC
2. E. Black	15	Y	FACU
3. D. Spirea	20	Y	FACW
4.			
5.			
	= Total Cover		

Herb Stratum (Plot size: 10' d.)			
1. Cr. Buttercup (Ran. repens)	40	Y	FAC
2. Can. Thistle (Cirsium arvense)	2	N	FAC
3. RC Grass (Phalaris arundinacea)	30	Y	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	= Total Cover		

Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum ___

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)
Total Number of Dominant Species Across All Strata: 5 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 80 (A/B)

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)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ___ No X

Remarks: Spirea rooted to below 12"
Pinus contorta (FAC) planted along property line
No obligate-wetland species No Hydric Soil/No Saturation

SOIL

Ses Sampling Point: DP20

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	7.5YR 2.5/2	100	—	—	—	—	Si Lo	
18-22	7.5YR 3/2	60	—	—	—	—	cl si Lo	moist
	" 2.5/2	30	—	—	—	—	cl si Lo	mix w/
	" 4/6	10	—	—	—	—	cl si Lo	charcoal

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: Undisturbed Area 4/6 → oxidized state

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): 24

Wetland Hydrology Present? Yes ___ No X

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

Remarks: Stormwater/overland flow ceased from yesterday (6TH)
Infiltration/Interflow

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

Project/Site: Sester-Gramer City/County: Clackamas Sampling Date: Dec 5+6 2024
Applicant/Owner: Sester Farms State: WA Sampling Point: DP 2.1
Investigator(s): R. Brewer Section, Township, Range: 03, 02S, 03E
Landform (hillslope, terrace, etc.): Terrace/Plain Local relief (concave, convex, none): — Slope (%): 3
Subregion (LRR): A Lat: 45.42238 Long: -122.41907 Datum: WGS84
Soil Map Unit Name: Delena (match to Bornstedt) NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)
Are Vegetation X , Soil ___ , or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___
Are Vegetation ___ , Soil ___ , or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes ___ No X
Hydric Soil Present? Yes ___ No X
Wetland Hydrology Present? Yes ___ No X

Is the Sampled Area within a Wetland? Yes ___ No X

Remarks: Tilled

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30' d.)			
1. Cottonwood (Populus balsamifera)	5	N	FAC
2.			
3.			
4.			
= Total Cover			
Sapling/Shrub Stratum (Plot size: 20' d.)			
1. H. Blackberry (Rubus discolor)	30	Y	FAC
2. P. Blackberry (R. Lacinatus)	15	Y	FACU
3. O. Grape	10	Y	FACU
4.			
5.			
= Total Cover			
Herb Stratum (Plot size: 10' d.)			
1. Unk grass (Agrostis ?)	20	Y	FAC
2. C. Thistle (Circium arvense)	3	N	FAC
3. Qalace (Daucus carota)	15	Y	FACU
4. Br. Fern (Pteridium aquilinum)	10	Y	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
= Total Cover			
Woody Vine Stratum (Plot size: ___)			
1.			
2.			
= Total Cover			

% Bare Ground in Herb Stratum ___

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 6 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

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)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:
___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ 5 - Wetland Non-Vascular Plants[1]
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ___ No X

Remarks:

SOIL

Sampling Point: Ses DP21

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-7	7.5YR 3/3	100	—	—	—	—	SiLo	
7-9	7.5YR 3/3	50	—	—	—	—	SiLo	
	4/4	50	—	—	—	—	ClSiLo	
9-18	7.5YR 4/4	85	—	—	—	—	ClSiLo	
	4/3	15	—	—	—	—	ClSiLo	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: Tilled

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): 24+

Wetland Hydrology Present? Yes ___ No X

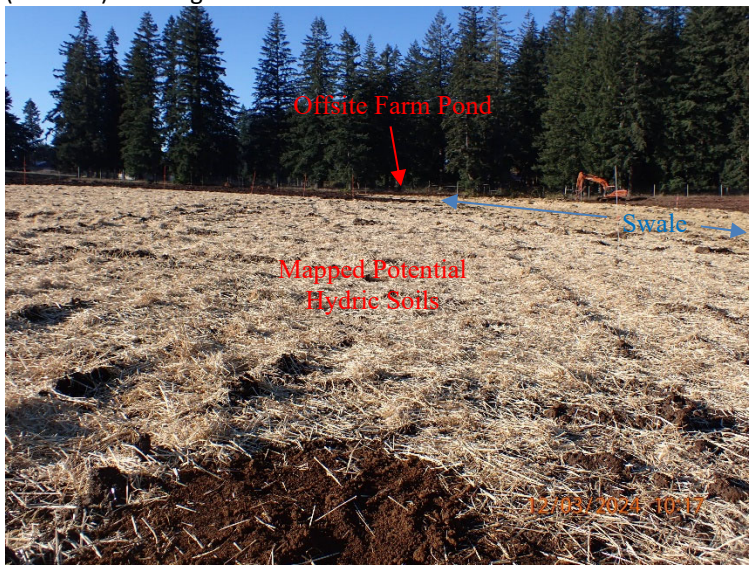
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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.

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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).

EVREN NORTHWEST INC. environmental & natural resource consultants	Gramor Field Property T2SR3E S03 TL03302 Damascus, Oregon	**Site Photographs**	Project No. 1972-24001-06 Appendix **A**

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.

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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.

EVREN NORTHWEST INC. environmental & natural resource consultants	Gramor Field Property T2SR3E S03 TL03302 Damascus, Oregon	**Site Photographs**	Project No. 1972-24001-06 Appendix **A**

Off-site upland area east of the swale.