Exhibit H

CRITICAL AREAS REPORT: WETLANDS & HABITAT CONSERVATION AREAS FOR LINDSHIER AVENUE PROPERTY

Bellingham, Washington Parcel No. 380316-159249

for Cool Runnings Construction, LLC

May 10, 2024



Project No. 220019

CRITICAL AREAS REPORT:
WETLANDS AND HABITAT CONSERVATION AREAS FOR
LINDSHIER AVENUE PROPERTY – PARCEL 380316-159249
BELLINGHAM, WASHINGTON

May 10, 2024

Prepared for:

Cool Runnings Construction, LLC David Campbell

Prepared by:

Miller Environmental Services, LLC 220 West Champion Street, Suite 270 Bellingham, Washington 98225 360.255.5799

ed@millerenvironmental.org

Ed Miller, PWS

Senior Biologist/Owner

Author Qualifications

This report was prepared by Ed Miller.

Ed Miller is a senior biologist and owner of Miller Environmental Services, LLC, who specializes in wetlands, wildlife, and habitat assessments. He is a Society of Wetland Scientists certified Professional Wetland Scientist (PWS), #1895. Mr. Miller obtained a Bachelor of Science in Terrestrial Ecology from Western Washington University in 1993 and a Masters of Environmental Science and Management with a focus on Watershed Management at the University of California at Santa Barbara in 2000. His experience includes preparing wetland delineations and reports, wetland functional assessments, stream and shoreline ordinary high water mark determinations, habitat conservation area reports, mitigation design, mitigation monitoring and floodplain habitat assessments for FEMA Endangered Species Act compliance. Mr. Miller has completed project permitting and compliance for agencies including U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, Washington Department of Fish and Wildlife, Washington Department of Ecology.

Disclaimer

This report and wetland and/or stream delineation, is based on protocols that are described and defined in manuals and publications utilized by Federal, State, and Local agencies. The wetland delineation methodology used is consistent with the *Washington State Wetlands Identification and Delineation Manual* (Ecology, 1997), the *U.S. Army Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory, 1987), *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (Corps, 2010), and subsequent Corps guidance. Completed work is based on conditions at the time of the site visit. No guarantees are given that a delineation determination or assessment will concur exactly with those performed by regulatory agencies or by other qualified professionals.

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1.0 INTRODUCTION

At the request of the applicant and property owner, Cool Runnings Construction, LLC, Miller Environmental Services, LLC (MES) completed a wetland delineation of a property at Lindshier Avenue (tax parcel 380316-159249), located on the northwest side of Lindshier Avenue, just northwest of East Sunset Drive in Bellingham, Washington; Section 16, Township 38 N, Range 03 E, W.M. The project location is shown below on **Figure 1**. A map of the property and critical areas is included as **Appendix A**.

This report presents the best professional judgment of MES in estimating the subject jurisdictional boundaries using the most up-to-date regulations, written policy, and guidance from the regulatory agencies. However, only the regulatory agencies can make a final determination of jurisdictional boundaries.

1.1 PURPOSE

This Critical Areas Report was conducted as required within the 2016 City of Bellingham Critical Areas Chapter [Bellingham Municipal Code (BMC) 16.55]. This report documents the location and nature of critical areas (wetlands and fish and wildlife habitat conservation areas) on the project site.

Project Site

Project Site

Project Site

Figure 1: Vicinity Map

2.0 METHODS

2.1 PRELIMINARY RESEARCH

Published information about local conditions was reviewed for known critical area occurrences in the project vicinity. The information reviewed included:

- National Wetlands Inventory (NWI), Wetlands Mapper, United States Fish and Wildlife Service (USFWS);
- Priority Habitats and Species Mapper, Washington State Department of Fish and Wildlife (WDFW);
- SalmonScape Mapper, WDFW;
- City of Bellingham CitylQ, City of Bellingham;
- Web Soil Survey, United States Department of Agriculture, Natural Resource Conservation Service (NRCS):
- National Hydric Soils List, United States Department of Agriculture, NRCS; and
- National Map Viewer, United States Geological Survey (USGS).

2.2 FIELD INVESTIGATION

Investigations of the subject property were conducted on May 4 and 5, 2022 to document site conditions. The site visit included a wetland delineation and an assessment of onsite habitat. Wetland boundaries and data plot locations were flagged. Site photographs taken during the site visit are included within **Appendix B**.

Wetlands were identified on the basis of hydrophytic vegetation, hydric soils, and evidence of wetland hydrology as described in the U.S. Army Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory, 1987), Corps Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (U.S. Army Corps of Engineers, 2010), and subsequent U.S. Army Corps of Engineers (Corps) guidance.

Hydrophytic vegetation (i.e., plants adapted to saturated soil conditions) was determined to be present when dominant cover of plants observed (greater than 50 percent) had an indicator status of facultative (FAC), facultative wetland (FACW), or obligate wetland (OBL). Plant species on-site were identified according to Cooke (1997), Pojar and MacKinnon (1994), and Hitchcock and Cronquist (1973). Plant indicator status was determined using the National Wetland Plant List, version 3.5 (U.S. Army Corps of Engineers, 2020).

Hydric soils were determined according to the methodology in the Field indicators of Hydric Soils in the United States, A Guide for Identifying and Delineating Hydric Soils, Version 8.2 (USDA NRCS, 2018).

Wetland hydrology was determined through the observation of soil saturation, surface ponding, or other primary and secondary indicators such as water marks, drift deposits, iron deposits, surface cracks, water-stained leaves, drainage patterns, etc. (U.S. Army Corps of Engineers, 2010). Data were collected on vegetation, soils, and hydrology at each data plot and recorded on data forms (**Appendix C**).

MES flagged wetland boundaries, which were subsequently located and mapped by professional land surveyors.

2.3 WETLAND CLASSIFICATION AND FUNCTIONAL ASSESSMENT

Wetlands were classified using the USFWS wetland classification system (Cowardin et al., 1979). A wetland rating was completed for the on-site wetlands, using the 2014 Washington State Wetland Rating System for Western Washington (Ecology Rating System) (Hruby, 2014). Rating forms are included in **Appendix D**.

Wetland delineators visited each wetland and determined wetland classes and categories using field observations and resources utilized during the preliminary data review process. Ecology recognizes four categories of wetlands based on sensitivity to disturbance, rarity, the functions they provide, and difficulty to replace.

A qualitative functional assessment was also conducted for the wetland based on the Ecology Rating System (Hruby, 2014). Hydrologic, water quality, and habitat functions were evaluated based on the scoring criteria listed in **Table 1**.

Table 1: 2014 Wetland Functional Assessment Criteria

	Criteria			
Wetland Functions	Low Score	Moderate Score	High Score	
Water Quality Functions	3-4	5-7	8-9	
Hydrology Functions	3-4	5-7	8-9	
Habitat Functions	3-4	5-7	8-9	

3.0 PROJECT AREA SETTING

3.1 WATERSHED

The property is located within the Lower Squalicum watershed, draining to Bellingham Bay - within Water Resource Inventory Area (WRIA) number 01.

The property contains a higher shelf area on the north side of Lindshier Avenue, then a steep slope through the center of the property draining water to the northwest. Water drains across the site to the northwest and down the steep slope. Several drainages are located within ravines on the slope, carrying water from the upper portion of the property to the northwest. Additionally, water is drained onto the property via a stormwater outfall. This consists of an outfall pipe and short ditch extended onto the property. This stormwater outfall collects water from Sunset Drive, Evergreen Avenue, Vincent Street and Idell Drive – all to the south.

3.2 PROJECT VICINITY

The subject property is located in the eastern portion of Bellingham, just off of East Sunset Drive, within the Barkley neighborhood. A small residential neighborhood is located to the south between Lindshier Avenue and East Sunset Drive. Areas to the north, east and west are undeveloped forest habitat.

3.3 PROJECT SITE

The review area includes all of the 4.91-acre property and a portion of Washington Department of Natural Resources Property (DNR) to the north of the east side of the property. The entire property contains forest habitat - dominated by Douglas fir (*Pseudotsuga menziesii*), western red cedar (*Thuja plicata*), big leaf maple (*Acer circinatum*), red alder (*Alnus rubra*), paper birch (*Betula papyrifera*), snowberry (*Symphoricarpos albus*), vine maple (*Acer circinatum*), Indian plum (*Oemleria cerasiformis*) and sword fern (*Polystichum munitum*).

Nine wetlands were located on the subject property, two extending offsite to the north and one extending offsite to the southeast. Three additional wetlands were observed on the adjacent DNR property to the north and two additional wetlands were observed in the undeveloped portion of the Lindshier Avenue right of way (ROW) adjacent to the east side of the property.

A site map is included in **Appendix A**. Site photographs are included in **Appendix B**.

4.0 RESULTS



4.1 PRELIMINARY RESEARCH

4.1.1 National Wetlands Inventory

The National Wetlands Inventory (NWI) shows a large Palustrine wetland in the northwest portion of the property, base of the steep slope, extending offsite to the north and west (USFWS, 2024).

4.1.2 Soils Survey Data

The property contains two mapped soil types, Whatcom silt loam, 0 to 3 percent slopes (soil unit 178) on the upper terrace (southeast portion) and Whatcom silt loam, 30 to 60 percent slopes (soil unit 181) on the sloped area. Both Whatcom silt loam soils are very deep and moderately well drained. They contain a seasonal high water table at a depth of 1.5 to 3 feet from December through April. These soils are listed as non-hydric (NRCS, 2024).

4.1.3 WDFW Priority Habitats and Species Data

The Washington State Fish and Wildlife (WDFW) Priority Habitats and Species (PHS) Mapper indicates only big brown bat (*Eptesicus fuscus*) over the entire township that includes the property. No other priority habitats or species are shown on the property. Wetland areas are shown on the northwest corner (base of the slope) extending offsite to the north and west (WDFW, 2024).

4.1.4 City of Bellingham Critical Areas

The City of Bellingham City IQ Mapper shows wetland areas adjacent to the north and west sides of the property (City of Bellingham, 2024).

The City of Bellingham Habitat Restoration Technical Assessment (ESA et. al., 2015) shows the property within forest block 072, designated as forest block protection – due to the large area of extended forest habitat, associated wetlands (to the northwest) and Squalicum Creek (to the northwest).

Additionally, the City of Bellingham Wildlife Corridor Analysis (Diamond Head Consulting, 2021) shows the forest area to the north and west and including the property as an important wildlife habitat area.

4.2 FIELD INVESTIGATION

4.2.1 Uplands

A majority of the property consists of upland forest habitat, including all of the sloped area of the property. The forest habitat is dominated by Douglas fir, western red cedar, big leaf maple, red alder, paper birch, snowberry, vine maple Indian plum and sword fern.

Upland soils generally consisted of very dark grayish brown (10YR 2/2) loams.

4.2.2 Wetlands

Nine wetlands were located on the subject property, two extending offsite to the north and one extending offsite to the southeast. Three additional wetlands were observed on the adjacent property to the north and two additional wetlands were observed in the undeveloped portion of the Lindshier Avenue right of way (ROW) adjacent to the east side of the property.

These wetlands are summarized below in **Table 2**. MES flagged all onsite wetland boundaries, which were subsequently surveyed by professional land surveyors and mapped in AutoCAD.

Table 2: Project Wetlands Summary

Wetland	Cowardin Classification	Ecology Category	HGM Class	Ecology Habitat Score	City of Bellingham Buffer Width (Feet) ¹
A (offsite)	PFO	III	Depressional	Moderate (5)	100
B (offsite)	PFO	III	Depressional	Moderate (5)	100
C (offsite)	PSS	IV	Depressional	Moderate (5)	02
D	PSS	III	Depressional	Moderate (5)	100
E	PSS	III	Slope	Moderate (5)	100
F (offsite)	PFO	III	Depressional	Moderate (5)	100
G	PFO	III	Depressional	Moderate (5)	<mark>O</mark> ²
H (offsite)	PSS	III	Depressional	Moderate (5)	<mark>0</mark> 2
	PEM	III	Slope	Moderate (5)	100
J	PSS	III	Depressional	Moderate (5)	<mark>0</mark> 2
K	PSS	III	Slope	Moderate (5)	100
L	PSS	III	Depressional	Moderate (5)	100
M	PSS	III	Depressional	Moderate (5)	100
N	PFO/PEM	III	Depressional	Moderate (6)	100

¹Assumes moderate intensity land use proposal – less than one unit per acre.

²Wetlands C, D, H and J are exempt from buffer requirements, per BMC 16.55.270(B)(1).

Wetlands A, B and C

Wetlands A, B and C are located completely offsite on the adjacent DNR property to the north. All three wetlands are small depressional wetlands. Wetlands A and B contain forest habitat while Wetland C contains scrub/shrub habitat.

Wetland conditions are documented in data points 1 (Wetland A), data point 3 (Wetland B) and data point 4 (Wetland C); while adjacent upland areas are documented in DP-2.

Vegetation. Wetland A is dominated by black cottonwood (*Populus balsamifera*) and vine maple (*Acer circinatum*); with little to no herb later. Wetland B is dominated by western redcedar (*Thuja plicata*), paper birch (*Betula papyrifera*), and vine maple – also with little to no herb layer. Wetland C contains vine maple and lady fern (*Athrium felix-femina*).

Hydrology. Wetlands B and C contain a significant amount of seasonal ponding, over a majority of the wetland. Wetland A has seasonal ponding over less than 25 percent of the wetland area. All three wetlands receive water from a small contributing basin immediately adjacent to the wetland. Wetlands A and B have seasonal outlets draining water to the north toward the steep slope. Wetland C had no apparent outlet.

Soils. Soils in Wetland A (DP-1) consist of very dark brown (10YR 2/2) loam from the surface to seven inches depth and a grayish brown (2.5Y 5/2) silt loam with redoximorphic concentrations from seven to 16 inches depth. These soils meet hydric soil indicator F3 - depleted matrix. Soils in Wetland B and C were similar, with a depleted layer below dark loam soils.

Wetland Rating. Wetlands A and B are classified as a Palustrine forested wetlands using the USFWS wetland classification system (Cowardin et al., 1979) and Wetland C is a Palustrine scrub shrub wetland. Per the City of Bellingham Municipal Code these wetlands were rated using the 2014 Ecology rating system (Hruby, 2014). Wetlands A and B received a total score of 16 points with a habitat score of five points (moderate) and Wetland C received a total score of 17 points with a habitat score of five points (moderate). These wetlands have no special characteristics and were rated as a Category III wetlands using a functional score of 16 or 17. For a moderate intensity land use proposal, Wetlands A and B require a 100 foot buffer. As Wetland C is less than 1,000 square feet in size, hydrologically isolated and has no special characteristics; per BMC 16.55.270(B)(1) it does not require a buffer.

Wetland D

Wetland D is a Palustrine scrub/shrub, depressional wetland located on the eastern side of the property. The wetland extends offsite to the north, onto the adjacent DNR property. The entire wetland was flagged.

Wetland conditions are documented in DP-5.

Vegetation. Wetland D is dominated by vine maple, salmonberry, twinberry (*Lonicera involucrata*), creeping buttercup (*Ranunculus repens*) and lady fern.

Hydrology. The wetland has a large area of seasonal ponding over greater than 50 percent of the wetland area. The wetland receives water from a small contributing basin immediately

adjacent to the wetland and drains eastward via a seasonal outlet toward the steep slope area.

Soils. The observed soils consisted of a black (10YR 2/1) loam from zero to six inches depth and a dark grayish brown (10YR 4/2) silt loam with redoximorphic features from six to 16 inches depth. This soil meets hydric soil indicator F3 – depleted matrix.

Wetland Rating. Wetland D is classified as a Palustrine scrub/shrub wetland using the USFWS wetland classification system (Cowardin et al., 1979). Per the City of Bellingham Municipal Code, the wetland was rated using the 2014 Ecology rating system (Hruby, 2014). The wetland received a total score of 16 points with a habitat score of five points (moderate). The wetland had no special characteristics and was rated as a Category III wetland using a functional score of 16. Wetland D is required to have a 100-foot buffer based on a proposed moderate intensity use.

Wetland E

Wetland E is a Palustrine scrub/shrub, slope wetland located at the eastern end of the property. The wetland extends offsite to the northeast. Only the upper portion of the wetland was flagged. The wetland extends downslope to the northwest.

Wetland conditions are documented in DP-6.

Vegetation. The wetland is dominated by plant species including vine maple, salmonberry, lady fern and creeping buttercup. The wetland contained some upland hummocks with snowberry (Symphoricarpos albus) and sword fern (*Polystichum munitum*).

Hydrology. Wetland E is a sloped wetland on a two to four percent slope (in the upper portion observed). The wetland contained areas of seasonal saturation and occasional ponding in some areas. Water enters the wetland from areas to the south and adjacent areas to the east and west and moves northward.

Soils. The observed soils in Wetland E consist of a very dark brown (10YR 2/2) loam from the surface to eight inches depth and a grayish brown (2.5Y 5/2 sandy loam with redoximorphic concentrations from eight to 16 inches depth. This soil meets hydric soil indicator F3 – depleted matrix.

Wetland Rating. Wetland E is classified as a Palustrine scrub/shrub wetland using the USFWS wetland classification system (Cowardin et al., 1979). Per the City of Bellingham Municipal Code, the wetland was rated using the 2014 Ecology rating system (Hruby, 2014). The wetland received a total score of 16 points with a habitat score of five points (moderate). The wetland had no special characteristics and was rated as a Category III wetland using a functional score of 16. This wetland requires a standard 100 foot buffer.

Wetlands F and H

Both Wetlands F and H are depressional wetlands located in the unopened Lindshier Avenue right-of-way adjacent to the south side of the property. Wetland F contains forest habitat while Wetland H contains scrub/shrub habitat.

Wetland conditions are documented in DP-7 (Wetland F) and DP-8 (Wetland H).

Vegetation. Dominant vegetation within Wetland F includes hardhack (*Spiraea douglasii*), black cottonwood, vine maple, black twinberry and creeping buttercup. Dominant vegetation within Wetland H includes black twinberry, black Hawthorne (*Crataegus* spp.) and cascara (*Frangula purshiana*).

Hydrology. Wetland F contains a large area of seasonal ponding, over 50 percent of the wetland area and a relatively small contributing basin – areas to the south (including some yard areas). Wetland H has a small area of seasonal ponding and a moderately sized contributing basin which also includes some developed yard areas. Both wetlands have seasonal outlets draining to the north.

Soils. Both wetlands have depleted soils at ten inches depth or shallower, below black or very dark grayish brown loam soils.

Wetland Rating. Wetland H is classified as a Palustrine scrub/shrub wetland and Wetland F is classified as a Palustrine forested wetland using the USFWS wetland classification system (Cowardin et al., 1979). Per the City of Bellingham Municipal Code, the wetlands were rated using the 2014 Ecology rating system (Hruby, 2014). Wetland F received a total score of 18 points with a habitat score of five points (moderate). Wetland H received a score of 17 points with a habitat score of 5 points (moderate). Both wetlands are Category III wetland based on the total scores. Wetland F requires a 100 foot buffer while Wetland H does not require a buffer per BMC 16.55.270(B)(1). The wetland is less than 1,000 square feet in size, hydrologically isolated and has no special characteristics.

Wetland G

Wetland G is a small Palustrine forested, depressional wetland located partly in the unopened Linshier Road ROW and partly on the southeast portion of the property.

Vegetation. Dominant vegetation within the wetland includes black cottonwood, black twinberry and reed canary grass.

Hydrology. The wetland had three inches of ponding over moderate portion of the wetland (25 to 50 percent of the wetland area). The wetland receives water from upland area, including vard, to the south. The wetland had no observable outlet.

Soils. Observed soils included very dark brown (10YR 2/2) loam with redoximorphic features in the upper part.

Wetland Rating. Wetland G is classified as a Palustrine forested wetland using the USFWS wetland classification system (Cowardin et al., 1979). Per the City of Bellingham Municipal Code the wetland was rated using the 2014 Ecology rating system (Hruby, 2014). The wetland received a total score of 18 points with a habitat score of five points (moderate). The wetland is rated as a Category III wetland. Under BMC 16.55.270(B)(1) this wetland does not require a buffer, as it is less than 1,000 square feet in size, hydrologically isolated and has no special characteristics.

Wetland I

Wetland I is a Palustrine emergent, slope wetland located in the center of the property. The wetland drains to a large head-cut on the steep slope area to the north.

Wetland conditions are documented in DP-9.

Vegetation. The wetland is dominated by plant species including lady fern, manna grass (*Glyceria elata*), creeping buttercup and Dewey's sedge (*Carex deweyana*).

Hydrology. Wetland I is a sloped wetland on a two to four percent slope. The wetland receives overflow water from Wetland K and the stormwater channel draining to Wetland K. Water leaves the wetland to the northeast, into a large head-cut /ravine that has formed on the steep slope below the wetland.

Soils. The observed soils in Wetland I consist of a very dark grayish brown (10YR 3/2) loam from the surface to ten inches depth and a dark grayish brown (2.5Y 4/2) sandy loam with redoximorphic concentrations from eight to 16 inches depth. This soil meets hydric soil indicator F3 – depleted matrix.

Wetland Rating. Wetland I is classified as a Palustrine emergent wetland using the USFWS wetland classification system (Cowardin et al., 1979). Per the City of Bellingham Municipal Code, the wetland was rated using the 2014 Ecology rating system (Hruby, 2014). The wetland received a total score of 16 points with a habitat score of five points (moderate). The wetland had no special characteristics and was rated as a Category III wetland using a functional score of 16. This wetland requires a standard 100 foot buffer.

Wetland J

Wetland J is a Palustrine scrub/shrub, slope wetland located in the western portion of the property. Wetland conditions are documented in DP-10 while adjacent upland conditions are documented in DP-11.

Vegetation. The wetland contains plants species including vine maple, black twinberry and reed canarygrass.

Hydrology. Wetland J is a depression with seasonal ponding over 50 percent of the wetland. The wetland receives water from adjacent areas in the immediate vicinity of the wetland – with a small contributing basin. No outlet was observed in the wetland.

Soils. The observed soils in this wetland consist of a very dark brown (10YR 2/2) loam from the surface to six inches depth and a very dark brown (10YR 2/2) loam with redoximorphic concentrations from six to 12 inches depth. This soil meets hydric soil indicator F6 – redox dark surface.

Wetland Rating. This wetland is classified as a Palustrine emergent wetland using the USFWS wetland classification system (Cowardin et al., 1979). Per the City of Bellingham Municipal Code, the wetland was rated using the 2014 Ecology rating system (Hruby, 2014). The wetland received a total score of 17 points with a habitat score of five points (moderate). The wetland had no special characteristics and was rated as a Category III wetland using a functional score of 17. Under BMC 16.55.270(B)(1) this wetland does not require a buffer, as it is less than 1,000 square feet in size, hydrologically isolated and has no special characteristics

Wetland K

Wetland K is a Palustrine scrub/shrub, slope wetland located on the south center portion of the property. This wetland is located on a slope just below a stormwater outfall ditch, where water is released and spreads out. The wetland appears to have been unintentionally created as a result of road construction and stormwater collection from these roads, per Code section 16.55.510 – wetland definition. This wetland may not be regulated by the City of Bellingham.

Wetland conditions are documented in DP-12.

Vegetation. The wetland contains plants species including red osier dogwood (*Cornus sericea*), black twinberry, Nootka rose (*Rosa nutkana*), slough sedge (*Carex obnupta*) and lady fern.

Hydrology. Wetland K is a sloped area where water from the stormwater outfall spreads out. A channel continues below the wetland, and was designated as Drainage 1.

Soils. The observed soils in this wetland consist of a black (10YR 2/1) silt loam with redoximorphic features from the surface to ten inches depth and a very dark grayish brown (10YR 3/2) loam with redoximorphic concentrations from 10 to 16 inches depth. This soil meets hydric soil indicator F6 – redox dark surface.

Wetland Rating. This wetland is classified as a Palustrine scrub/shrub wetland using the USFWS wetland classification system (Cowardin et al., 1979). Per the City of Bellingham Municipal Code, the wetland was rated using the 2014 Ecology rating system (Hruby, 2014). The wetland received a total score of 16 points with a habitat score of five points (moderate). The wetland had no special characteristics and was rated as a Category III wetland using a functional score of 16. This wetland requires a standard 100 foot buffer.

Wetland L

Wetland L is a Palustrine scrub/shrub, depressional wetland.

Vegetation. The wetland contains plants species including vine maple, salmonberry and reed canarygrass.

Hydrology. Wetland L is a depression with seasonal ponding over 50 percent of the wetland. The wetland receives water from adjacent areas in the immediate vicinity of the wetland – with a small contributing basin. A seasonal outlet drains water out of the wetland to the north, toward Drainage 2.

Soils. Soils were not directly observed in this wetland.

Wetland Rating. This wetland is classified as a Palustrine scrub/shrub wetland using the USFWS wetland classification system (Cowardin et al., 1979). Per the City of Bellingham Municipal Code, the wetland was rated using the 2014 Ecology rating system (Hruby, 2014). The wetland received a total score of 17 points with a habitat score of five points (moderate). The wetland had no special characteristics and was rated as a Category III wetland using a functional score of 17. This wetland requires a standard 100 foot buffer.

Wetland M

Wetland M is a Palustrine scrub/shrub, depressional wetland located in the eastern portion of the property. Wetland conditions are documented in DP-14 while adjacent upland conditions are documented in DP-15.

Vegetation. The wetland contains plants species including vine maple, black twinberry and salmonberry.

Hydrology. Wetland M is a depression with seasonal ponding over less than 25 percent of the wetland. The wetland receives water from adjacent areas in the immediate vicinity of the wetland – with a small contributing basin. The wetland drains via a seasonal outlet westward toward Drainage 2.

Soils. The observed soils in this wetland consist of a very dark grayish brown (10YR 3/2) loam with redoximorphic features from the surface to eight inches depth and a grayish brown (2.5Y 5/1) silt loam with redoximorphic concentrations from eight to 16 inches depth. This soil meets hydric soil indicator F36 – depleted matrix.

Wetland Rating. This wetland is classified as a Palustrine scrub/shrub wetland using the USFWS wetland classification system (Cowardin et al., 1979). Per the City of Bellingham Municipal Code, the wetland was rated using the 2014 Ecology rating system (Hruby, 2014). The wetland received a total score of 16 points with a habitat score of five points (moderate). The wetland had no special characteristics and was rated as a Category III wetland using a functional score of 16. This wetland requires a standard 100 foot buffer.

Wetland N

Wetland N is a large Palustrine forested and emergent, depressional wetland located in the northwest corner of the property. The wetland extends offsite to the north and west. Wetland conditions are documented in DP-16.

Vegetation. The observed portion of the wetland is forested, dominated by red alder, salmonberry, vine maple, skunk cabbage (*Lysichiton Americanum*), lady fern and slough sedge. Aerial photography shows areas of the wetland to the west dominated entirely by reed canarygrass (*Phalaris arundinacea*).

Hydrology. Wetland N is a large wetland, with sloped areas and depressional areas. Seasonally ponded areas are estimated at 25 to 50 percent of the wetland area. Water enters the wetland from adjacent upland areas, drainages and Squalicum Creek. Water leaves the wetland via Squalicum Creek at the western end.

Soils. The observed soils in this wetland consist of a very dark grayish brown (10YR 3/2) sandy loam from the surface to six inches depth and a dark grayish brown (10YR 4/2) cobbly sandy loam with redoximorphic concentrations from six to 16 inches depth. This soil meets hydric soil indicator F3 – depleted matrix.

Wetland Rating. This wetland is classified as a Palustrine forested and emergent wetland using the USFWS wetland classification system (Cowardin et al., 1979). Per the City of Bellingham Municipal Code, the wetland was rated using the 2014 Ecology rating system (Hruby, 2014). The

wetland received a total score of 18 points with a habitat score of six points (moderate). The wetland had no special characteristics and was rated as a Category III wetland using a functional score of 18. This wetland requires a standard 100 foot buffer.

4.2.3 Fish and Wildlife Habitat Conservation Areas

In the City of Bellingham, designated fish and wildlife habitat conservation areas (16.55.470.A) includes:

- Areas with which State or Federally designated endangered, threatened, and sensitive species have a primary association. This includes state priority habitats and areas associated with state priority species;
- 2. Commercial and recreational shellfish areas:
- 3. Naturally occurring ponds under 20 acres;
- 4. Waters of the State, including lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses;
- 5. State natural area preserves and natural resource conservation areas;
- 6. Areas of rare plant species and high quality ecosystems; and
- 7. Land useful or essential for preserving connections between habitat blocks and open spaces.

<u>Streams</u>. Several steep drainages were observed on the property. These are located within steep erosional ravines down the steep slope. These would be considered non-fish streams under City of Bellingham code, requiring a 50 foot minimum buffer.

<u>High Quality Ecosystem</u>. The City of Bellingham Habitat Restoration Technical Assessment (ESA et. al., 2015) shows the property within forest block 072, designated as forest block protection – due to the large area of extended forest habitat, associated wetlands (to the northwest) and Squalicum Creek (to the northwest). Additionally, the City of Bellingham Wildlife Corridor Analysis (Diamond Head Consulting, 2021) shows the forest area to the north and west and including the property as an important wildlife habitat area.

<u>Bats</u>. Bat species have been mapped within the township inclusive of the subject property. Bats may utilize the forest area for foraging, roosting and nesting.

4.2.4 Off-site Areas

Off-site areas were viewed as feasible given site conditions at the time of the site visit. Other information was used where applicable including aerial photography and CitylQ (City of Bellingham, 2022) mapping to assess off-site conditions.

Off-site Areas- West

A cleared gas line corridor is located along the west side of the property. Wetland N extends up the slope, to the south, along this corridor. Forest habitat, including forested wetland and upland, is located to the west of the utility corridor.

Off-site Areas- East

Developed single family residences and the unopened Lindshier Avenu ROW are located to the east of the property. The residences front East Sunset Drive. Two wetlands were flagged within the unopened Lindshier Avenue ROW, Wetland F and H.

Off-site Areas- South

Lindshier Avenue is located along the south side of the project site. Additionally, a stormwater treatment pond is located south of the western end of the property, between the property and Lindshier Avenue. This treatment pond collects and treats water from Lindshier Avenue and drains to Drainage 3 on the west side of the property.

Off-site Areas- North

The property to the north is undeveloped forest habitat, including Wetland N extending to the north and northeast below the steep slope. Upland forest habitat is located along the slope areas. Wetlands A, B and C were delineated on the bench area, above the steep slope, on the adjacent property.

4.3 WETLAND FUNCTIONAL ASSESSMENT

Wetland functional value was assessed for utilizing the Ecology Wetland Rating Form for Western Washington (Hruby, 2014). This rating method evaluates wetlands based on three categories of function, which include water quality, hydrologic function, and habitat value.

Table 3: Wetland Functional Value Summary¹

Wetland	Water Quality Function	Hydrologic Function	Habitat Function
А	Moderate (6)	Moderate (5)	Moderate (5)
В	Moderate (6)	Moderate (5)	Moderate (5)
С	Moderate (7)	Moderate (5)	Moderate (5)
D	Moderate (6)	Moderate (5)	Moderate (5)
E	Moderate (7)	Low (4)	Moderate (5)
F	Moderate (7)	Moderate (6)	Moderate (5)
G	Moderate (7)	Moderate (6)	Moderate (5)
Н	Moderate (7)	Moderate (5)	Moderate (5)
I	Moderate (7)	Low (4)	Moderate (5)
J	Moderate (7)	Moderate (5)	Moderate (5)
K	Moderate (6)	Moderate (5)	Moderate (5)
L	Moderate (7)	Moderate (5)	Moderate (5)
М	Moderate (6)	Moderate (5)	Moderate (5)
N	Moderate (7)	Moderate (5)	Moderate (6)

¹Numerical functional value scores included in parentheses.

4.3.1 Water Quality Function

Water quality function is assessed by characterizing the amount and type of vegetation present within a wetland. Plants enhance sedimentation by acting like a filter causing sediment particles to drop to the wetland surface. Other variables include the average slope within slope wetlands, outlet type, and amount of seasonal ponding within depressional wetlands. The potential for the landscape to support water quality functions is also assessed, including potential pollutant sources from stormwater septic systems or other sources. Additionally, water quality value to society is assessed based on the wetland's proximity to polluted waterbodies, with the assumption that wetlands can improve water quality before reaching downstream waterways.

All of the wetlands onsite provide a moderate level of water quality function. Generally, they are all vegetated wetlands with seasonal outlets and areas of seasonal ponding. Wetlands C, E, F, G, H, I J, L and N have a higher level of function as they have the opportunity to improve water quality – with residences and yards in proximity to the wetland. All of the wetlands are located within a basin with a 303(d) listed water downgradient.

4.3.2 Hydrologic Function

Wetlands have the ability to reduce flooding and stream erosion in downstream areas. This is accomplished through the entrainment, storage, and slow release of water, which acts to moderate flood pulses following storm events. Characteristics of this function include the vegetation characteristics (reduction of water velocity in slope wetlands), outlet type, and depth of storage for depressional wetlands. Hydrologic function is also influenced by the

landscape and input of potential stormwater discharges and excess runoff from urban and developed areas. The hydrologic function of a wetland is also assessed in relation to its value to society. Wetlands that are located upstream of flood zones may help reducing flooding and protect down-gradient resources (human or natural).

All of the wetlands, except Wetlands E and I, have a moderate level of hydrologic function. Most of these wetlands have seasonal outlets, small contributing basins and limited seasonal ponding. Some of the wetlands have storm water inputs while several do not. Wetland E and I are slope wetlands which have less opportunity to reduce downgradient flooding. All of the wetlands drain to a basin, Squalicum drainage, where they may help reduce downstream flooding.

4.3.3 Habitat Function

Wetlands can provide habitat value to a variety of wildlife species by providing a variety of habitat types, water regimes, habitat features (such as snags and downed logs), and number of plant species. Additionally, the wetland's opportunity to provide habitat is important, as characterized by buffer condition, corridors and connections, position in the landscape, and proximity to priority habitats and undisturbed habitat.

All of the wetlands onsite provide moderate habitat function. The wetlands have one habitat type (scrub/shrub or forest), two hydroperiods, no habitat interspersion, few or no habitat features, and priority habitats within 100 meters (priority snags and logs, stream, riparian). Additionally, the property is disconnected from larger habitat blocks by roads and development. Wetland N has a higher level of habitat function due to the presence of multiple habitat types and three hydroperiods.

5.0 REGULATORY REQUIREMENTS

The wetlands identified on the property are subject to federal regulations under the Clean Water Act (CWA) Sections 404 and 401, as well as state regulations under the Growth Management Act administered by the City of Bellingham under the 2016 Critical Areas Chapter (BMC 16.55).

5.1 CWA SECTION 404- US ARMY CORPS OF ENGINEERS

Pursuant to Section 404 of the CWA, the Corps regulates the discharge of dredged and/or fill material into waters of the United States, including wetlands. Impacts to onsite wetlands would likely require a Nationwide Permit (for up to 0.5 acre of wetland fill) or an Individual Permit (for greater than 0.5 acre of wetland fill). If impacts to the onsite wetlands are proposed, a Corps permit will be required for this project.

5.2 CWA SECTION 401 - DEPARTMENT OF ECOLOGY

Ecology is the state agency responsible for administering the CWA Section 401 Water Quality Certification program. Impacts to wetlands may require approval or a waiver from the Department of Ecology. If impacts to wetlands are proposed, Ecology approval will likely be necessary for this project.

5.3 CRITICAL AREAS ORDINANCE - CITY OF BELLINGHAM

The City of Bellingham regulates critical areas, including wetlands and their associated buffers, and fish and wildlife habitat conservation areas under Title 16, Chapter 55 of the Bellingham Municipal Code. Impacts to wetlands and buffers require a Critical Area Permit and compensatory mitigation. Buffer widths are determined based on the proposed land use intensity, wetland category, and habitat score. Wetland buffers are listed in **Table 2**. Wetlands C, G, H and J are exempt from buffer requirements due to their wetland rating (Category III), small size (less than 1,000 square feet), hydrologic isolation and lack of special characteristics. The drainages located on the property were designated as non-fish streams, due to their small size and extreme gradient. Under City of Bellingham Code non-fish streams require a minimum 50 foot buffer.

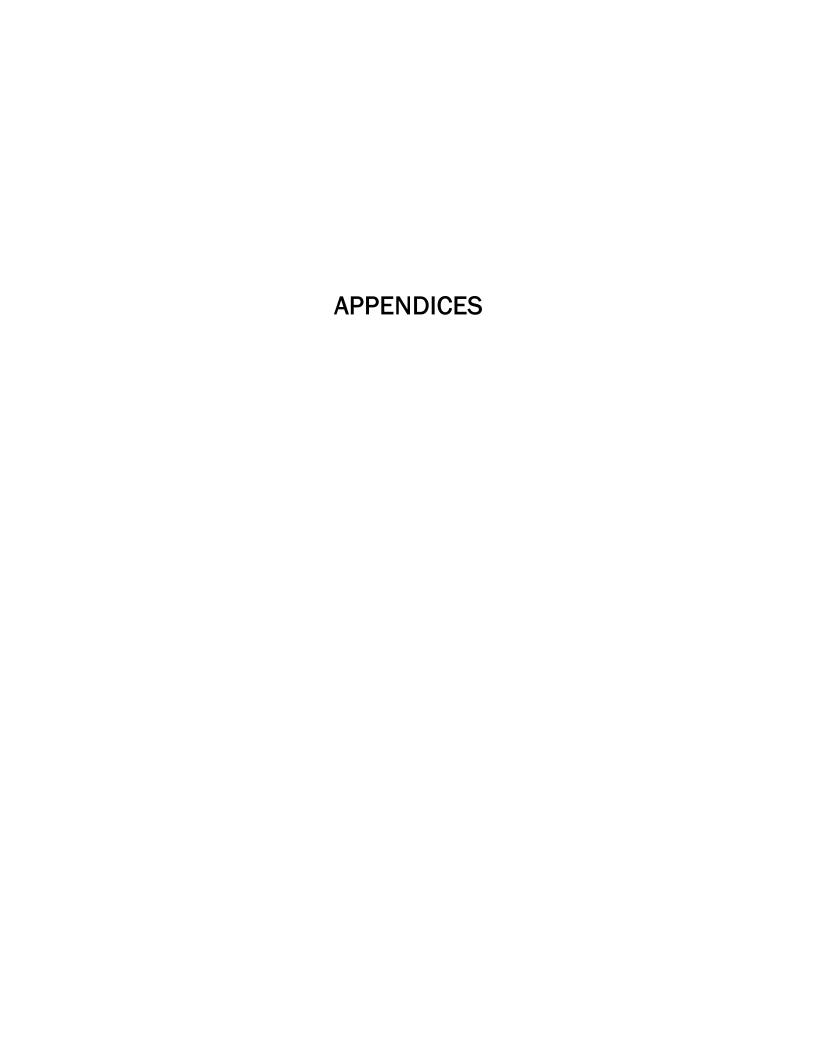
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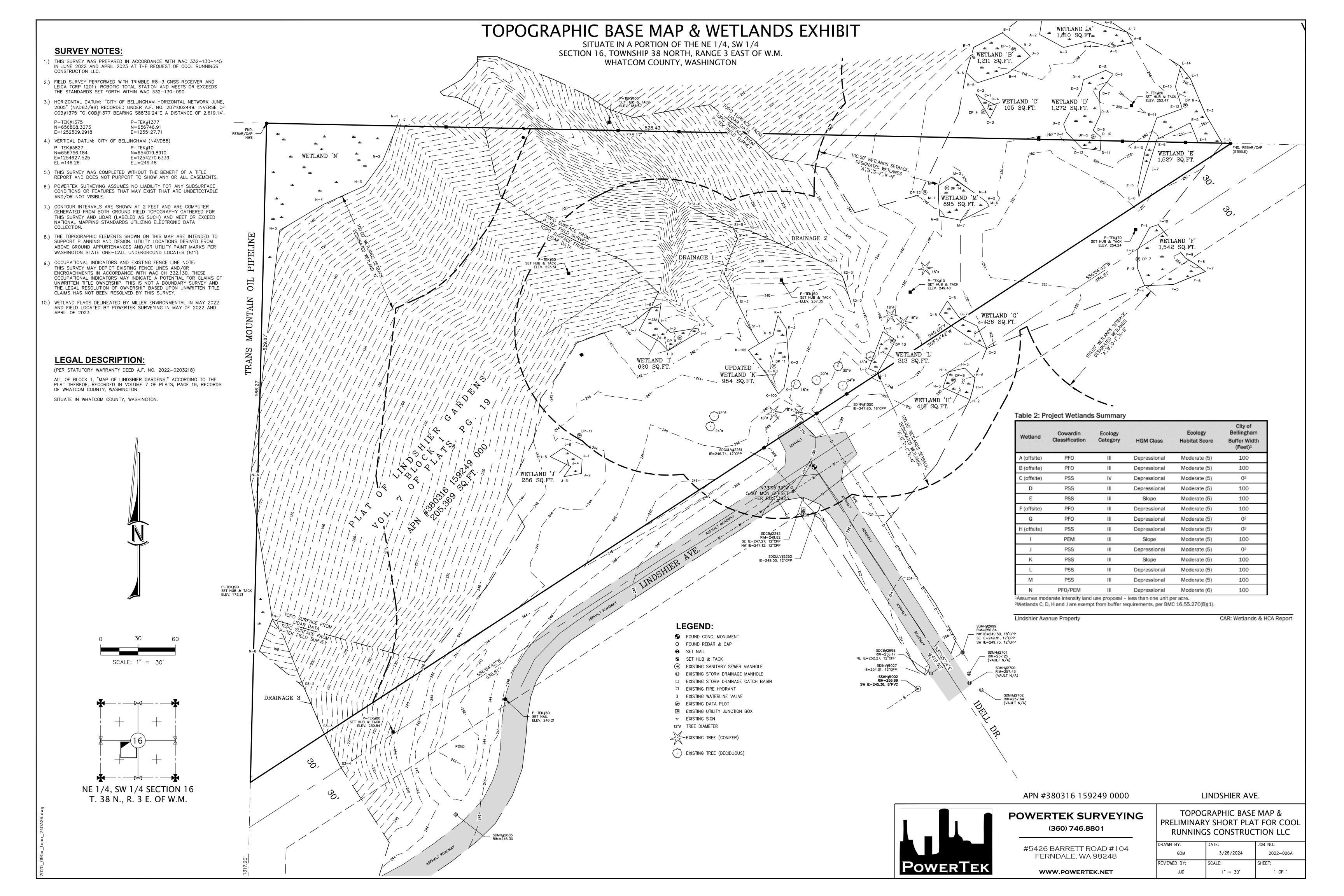
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Appendix A Project Maps



Appendix B Site Photographs



Photo 1. View over Wetland A (5/4/22).



Photo 2. View over Wetland C (5/4/22).



Photo 3. View over Wetland D (5/4/22).



Photo 4. View over Wetland E (5/4/22).



Photo 5. View southeast over Wetland F (5/4/22).





Photo 7. View over Wetland B (5/4/22).



Photo 8. View over upland forest on the west side of the property (5/4/22).



Photo 9. View over Wetland H (5/4/22).



Photo 10. View west over Wetland I (5/4/22).



Photo 11. View north over the upper end of head cut below Wetland I (5/4/22).



Photo 12. View over Wetland J (5/4/22).



Photo 13. View south over Wetland K (5/4/22).





Photo 15. View north over culvert outlet and ditch draining to Wetland K (5/4/22).



Photo 16 View over Wetland L (5/4/22).



Photo 17. View north over Drainage 2 (5/4/22).



Photo 18. View west along the south boundary of Wetland N (5/4/22).



Photo 19 View north along the pipeline corridor and Wetland N along the west side of the property (5/4/22).



Photo 20. View south over Drainage 1 just above confluence with Drainage 2 (5/4/22).

Appendix C Wetland Data Forms

WETLAND DETERMINATION DATA FORM - Western Mountains, Vaileys, and Coast Region Project/Site: Lindshier Ave City/County: Bellingham Sampling Date: 5/4/22 Applicant/Owner: Cool Bunnings Construction State: WM Sampling Point: DP-1 Investigator(s): E.Miller Section, Township, Range: 16 /32 W/02 E Landform (hillslope, terrace, etc.): dep Local relief (concave, convex, none): Concave Slope (%): O Subregion (LRR): Lat: Long: Datum: NWI classification: _____ O Soil Map Unit Name: 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 Hydric Soil Present? Yes ⊠ No 🗆 within a Wetland? Yes ⊠ No 🏻 Wetland Hydrology Present? Yes ⊠. No 🏻 Remarks: - DNR propul VEGETATION - Use scientific names of plants. Absolute Dominant Indicator Dominance Test worksheet; Tree Stratum (Plot size:) 1. Populus by Species? Status % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species 100 = Total Cover That Are OBL, FACW, or FAC: Sapling/Shrub Stratum (Plot size: ____) 1. Acr c's Prevalence Index worksheet: 2._____ Total % Cover of: Multiply by: OBL species _____ x 1 = ____ FACW species _____ x 2 = ____ FAC species _____ x 3 = ____ = Total Cover FACU species _____ x 4 = ____ Herb Stratum (Plot size: ____) UPL species _____ x 5 = ____ 1. <u>Moss</u> <u>10</u> ____ Column Totals: _____ (A) ____ (B) Prevalence Index = B/A = 4. Hydrophytic Vegetation Indicators: ☐ Rapid Test for Hydrophytic Vegetation ☑_Dominance Test is >50% Prevalence Index is ≤3.0¹ ☐ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Wetland Non-Vascular Plants¹ 10. ☐ Problematic Hydrophytic Vegetation¹ (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Woody Vine Stratum (Plot size:) Hydrophytic Vegetation _____ = Total Cover Yes X No □ Present? % Bare Ground in Herb Stratum _____ Remarks:

Sampling Point: DP~ |

	cription: (Describe	to the depth r	leeded to documer	t tite maioater	or commi	n the absence of Indicators.)
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					,	
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¹ Type: C=C	oncentration, D=De	pletion, RM≃Re	duced Matrix, CS=C	Covered or Coat	ed Sand G	rains. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Solis ³ :
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☐ Histic Ep	oipedon (A2)		Stripped Matrix (Se	S)	. 355 BA 4\	☐ Red Parent Material (TF2) ☐ Very Shallow Dark Surface (TF12)
☐ Black Hi	•		Loamy Mucky Mine		(MLKA 1)	Other (Explain in Remarks)
	en Sulfide (A4)		Loamy Gleyed Mat			Lit Other (Explain as reconstant)
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	ark Surface (A12)			•		wetland hydrology must be present,
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Primary Indi Surface Surface Saturati Sedime Drift De Algal March Surface Inundat Sparsel Field Obse Surface Water Table Saturation	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) a Soil Cracks (B6) ion Visible on Aeria ly Vegetated Conca- ervations: ater Present? Present?	I Imagery (B7) ve Surface (B8) Yes I No I Yes Z No I Yes Z No I	Water-Staine 1, 2, 4A, a Salt Crust (B' Aquatic Inver Hydrogen Su Oxidized Rhi Presence of I Recent Iron F Stunted or St Other (Explain	and 4B) 11) tebrates (B13) litide Odor (C1) zospheres along Reduced Iron (C Reduction in Tilli cressed Plants (I in in Remarks)	Living Root (4) ed Soils (Co (1) (LRR A	AA, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ols (C3) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
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Primary Indi Surface Surface Saturati Sedime Drift De Algal Macon Surface Inundat Sparsel Field Obse Surface Water Table Saturation	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) a Soil Cracks (B6) ion Visible on Aeria ly Vegetated Conca- ervations: ater Present? Present?	I Imagery (B7) ve Surface (B8) Yes I No I Yes Z No I Yes Z No I	Water-Staine 1, 2, 4A, a Salt Crust (B' Aquatic Inver Hydrogen Su Oxidized Rhi Presence of I Recent Iron F Stunted or St Other (Explain	and 4B) 11) tebrates (B13) litide Odor (C1) zospheres along Reduced Iron (C Reduction in Tilli cressed Plants (I in in Remarks)	Living Root (4) ed Soils (Co (1) (LRR A	AA, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ols (C3) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Primary Indi Surface Surface Saturati Water M Sedime Drift De Algal M Iron De Surface Inundat Sparsel Field Obse Surface Water Table Saturation I (Includes of Describe R	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) a Soil Cracks (B6) ion Visible on Aeria ly Vegetated Conca- ervations: ater Present? Present?	I Imagery (B7) ve Surface (B8) Yes I No I Yes Z No I Yes Z No I	Water-Staine 1, 2, 4A, a Salt Crust (B' Aquatic Inver Hydrogen Su Oxidized Rhi Presence of I Recent Iron F Stunted or St Other (Explain	and 4B) 11) tebrates (B13) litide Odor (C1) zospheres along Reduced Iron (C Reduction in Tilli cressed Plants (I in in Remarks)	Living Root (4) ed Soils (Co (1) (LRR A	AA, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ols (C3) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Primary Indi Surface Surface Saturati Water M Sedime Drift De Algal M Iron De Surface Inundat Sparsel Field Obse Surface Water Table Saturation I (Includes of Describe R	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) a Soil Cracks (B6) ion Visible on Aeria ly Vegetated Conca- ervations: ater Present? Present?	I Imagery (B7) ve Surface (B8) Yes I No I Yes Z No I Yes Z No I	Water-Staine 1, 2, 4A, a Salt Crust (B' Aquatic Inver Hydrogen Su Oxidized Rhi Presence of I Recent Iron F Stunted or St Other (Explain	and 4B) 11) tebrates (B13) litide Odor (C1) zospheres along Reduced Iron (C Reduction in Tilli cressed Plants (I in in Remarks)	Living Root (4) ed Soils (Co (1) (LRR A	AA, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ols (C3) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

Tree Stratum (Plot size:) 1. Acer was \$\frac{\partial \text{Cover}}{\partial \text{Cover}} \frac{\partial \text{Species?}}{\partial \text{Status}} \frac{\partial \text{Number of Dominant Species}}{\partial \text{Total Number of Dominant Species}} \frac{2}{\partial \text{Total Number of Dominant}} \frac{2}{\partial \text{Total Number of Dominant}} \frac{2}{\partial \text{Species Across All Strata:}} \frac{2}{\partial Species Across All Strat	%): \
Investigator(s):	%): \
Investigator(s):	%): \
Landform (hillstope, terrace, etc.): Slope (Subregion (LRR): Lat: Long: Datum: Soil Map Unit Name: NWI classification: WE 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 (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important feature thydrology Present? Yes No (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important feature thydrology Present? Yes No (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important feature thydrology Present? Yes No (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important feature thydrology Present? Yes No (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important feature the Sampled Area within a Wetland? Yes No (If needed, explain any answers in Remarks.) Summary Of Dominant Species Status (If needed, explain any answers in Remarks.) Summary Of Dominant Species That Are OBL, FACW, or FAC: 10 If needed, explain any answers in Remarks.) Sapling/Shrub Stratum (Plot size:)	
Soil Map Unit Name: NWI classification:	
Soil Map Unit Name:	
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 Circumstences" present? Yes \(\) No \(\) Are Vegetation \(\), soil \(\), or Hydrology \(\) naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important feature by the sampled Area within a Wetland? Hydrophytic Vegetation Present? Yes \(\) No \(\) No \(\) Hydric Soil Present? Yes \(\) No \(\) Wetland Hydrology Present? Yes \(\) No \(\) Wetland Hydrology Present? Yes \(\) No \(\) Absolute within a Wetland? Yes \(\) No \(\) VEGETATION - Use scientific names of plants. Tree Stratum (Plot size: \) 1. Accer where \(\) Absolute \(\) Species? Status \(\) Cover \(\) Species? Status \(\) Number of Dominant Species \(\) That Are OBL, FACW, or FAC: \(\) Total Number of Dominant Species \(\) That Are OBL, FACW, or FAC: \(\) Prevalence index worksheet: \(\) Total % Cover of: Multiply by:	
Are Vegetation, Soil, or Hydrology significantly disturbed?	'es, etc
Are Vegetation, Soll, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important feature	es, etc
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important feature by drophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No No Wetland Hydrotogy Present? Yes No No Within a Wetland? Yes No No No No No No No N	es, etc
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Wetland Hydrology Present? Wetland Hydrology Present? Wetland Hydrology Present? Wetland Hydrology Present? Wetland Hydrology Present? Wetland Hydrology Present? Wetland Hydrology Present? Wetland Hydrology Present? Yes No Wetland? Yes No Wetland?	es, etc
Hydric Soil Present? Wetland Hydrology Present? Remarks: Welland Hydrology Present? Yes No Welland? Yes	
Wetland Hydrology Present? Wetland Hydrology Present? Yes \ No \ \ No	-
Remarks: Upland ad; to Sw Side welland A VEGETATION - Use scientific names of plants. Tree Stratum (Plot size:) 1. Acer was	
VEGETATION - Use scientific names of plants. Tree Stratum (Plot size:	
Tree Stratum (Plot size:) 1. Acer was	
1. Acer was Species? Status 1. Acer was GOV Faced 2. Escado dence me 20 V Faced 3. There of Dominant Species That Are OBL, FACW, or FAC: 4. Belling/Shrub Stratum (Plot size: 1. Symphotical pos a 40 V Faced 2. Acer Ci 20 V Faced Freeding of Dominant Species That Are OBL, FACW, or FAC: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by:	
1. Acer was 60 Facul Number of Dominant Species That Are OBL, FACW, or FAC: 2 2. Pseudodence me 20 Facul Total Number of Dominant Species That Are OBL, FACW, or FAC: 4. Percent of Dominant Species Across All Strata: Sapling/Shrub Stratum (Plot size:) 1. Symphoticar pos a 40 Fac Prevalence Index worksheet: 20 Fac Total % Cover of: Multiply by:	
2. Pseudodence me 20 V Fac U 3. Thria Pl 10 Fac Species Across All Strata: 4. Betwo pa 10 Fac Percent of Dominant Species Across All Strata: Sapling/Shrub Stratum (Plot size:) 1. Symphoticar pos a 40 V Fac Prevalence Index worksheet: 2. Acer Ci 20 Multiply by:	
3. Thy a part of Dominant Species Across All Strata: Septing/Shrub Stratum (Plot size:) 1. Symphoticar pos a 40 Fac Fac Frevalence Index worksheet: 2. Acer Ci 20 Fac Total & Cover of: Multiply by:	(A)
4. Setula pa Fac Percent of Dominant Species That Are OBL, FACW, or FAC: 40 1. Symphoticar pos a 40 Fac Prevalence Index worksheet: Total % Cover of: Multiply by:	
Sapling/Shrub Stratum (Plot size:) 1. Symphotic curpos a 40 Frevalence Index worksheet: 2. Acer C: Total & Cover of: Multiply by:	(B)
1. Symphoticar pos al 40 / Fac Prevalence Index worksheet: 2. Acer Ci 20 / Fac Total & Cover of: Multiply by:	(A/B)
3 OBL species x 1 =	
4 FACW species x 2 =	
5. FAC species x 3 =	
Total Cover FACU species	
Tierb Stratum (Flot size.)	
Column Totale: (A)	
	_ , ,
4. Hydrophytic Vegetation Indicators:	
6	
6	-
7. □ Prevalence Index is ≤3.0¹ 8. □ Morphological Adaptations¹ (Provide suppor	
9. data in Remarks or on a separate sheet	ing
10 Wetland Non-Vascular Plants ¹	İ
11. Problematic Hydrophytic Vegetation (Expla	
Woody Vine Stratum (Plot size:) = Total Cover Indicators of hydric soil and wetland hydrology be present, unless disturbed or problematic.	n)
Rydrophytic Vegetation	
% Bare Ground in Herb Stratum = Total Cover Present? Yes ☐ No ☑	
Remarks;	

Sampling Point: 77-2

Profile Description; (Describe to the de	pth needed to document the indicator or co	nfirm the	absence of indicators.)
Denth Matrix	Redox Features		
(inches) Color (moist) %	Color (moist) % Type ¹ Loc	<u> </u>	xture Remarks
0-0 10-18 5/5		<u> 1 (</u>	par
9-16 10-18-3/L.	5	14-19	pam
			
-			
1-Dune: C=Concentration D=Depletion Ri	M=Reduced Matrix, CS=Covered or Coated Sa	nd Grains	2 Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to a	II LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
☐ Histosol (A1)	Sandy Redox (S5)		2 cm Muck (A10)
☐ Histic Epipedon (A2)	Stripped Matrix (S6)		Red Parent Material (TF2)
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1) (except MLR	A 1)	☐ Very Shallow Dark Surface (TF12)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)		Other (Explain in Remarks)
☐ Depleted Below Dark Surface (A11)	Depleted Matrix (F3)		3 Indicators of hydrophytic vegetation and
☐ Thick Dark Surface (A12)	☐ Redox Dark Surface (F6)☐ Depleted Dark Surface (F7)		wetland hydrology must be present,
Sandy Mucky Mineral (S1)	☐ Depleted Dark Surface (+7) ☐ Redox Depressions (F8)		unless disturbed or problematic.
Sandy Gleyed Matrix (S4) Restrictive Layer (If present):			
Туре:			
Depth (inches):		н	lydric Soil Present? Yes □ No 🗵
Remarks:			
Remarks.			•
HYDROLOGY			
Wetland Hydrology Indicators:			Secondary Indicators (2 or more required)
	red; check all that apply)	4 841 534	Secondary Indicators (2 or more required) Weter Stringed Leaves (B9) (MI RA 1, 2,
Wetland Hydrology Indicators: Primary Indicators (minimum of one requi	☐ Water-Stained Leaves (B9) (excep	t MLRA	☐ Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators: Primary Indicators (minimum of one requi	☐ Water-Stained Leaves (B9) (excep 1, 2, 4A, and 4B)	t MLRA	☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requi ☐ Surface Water (A1) ☐ High Water Table (A2) ☐ Saturation (A3)	☐ Water-Stained Leaves (89) (excep1, 2, 4A, and 4B)☐ Salt Crust (B11)	t MLRA	☐ Water-Stained Leaves (B9) (MLRA 1, 2,4A, and 4B)☐ Drainage Patterns (B10)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requi ☐ Surface Water (A1) ☐ High Water Table (A2) ☐ Saturation (A3) ☐ Water Marks (B1)	 □ Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) 	t MLRA	 □ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requi ☐ Surface Water (A1) ☐ High Water Table (A2) ☐ Saturation (A3) ☐ Water Marks (B1) ☐ Sediment Deposits (B2)	 □ Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) 		 □ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	 □ Water-Stained Leaves (B9) (except, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Livin 		 □ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requi ☐ Surface Water (A1) ☐ High Water Table (A2) ☐ Saturation (A3) ☐ Water Marks (B1) ☐ Sediment Deposits (B2) ☐ Drift Deposits (B3) ☐ Algal Mat or Crust (B4)	 □ Water-Stained Leaves (B9) (except, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Livin □ Presence of Reduced Iron (C4) 	g Roots ((□ Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	 □ Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Livin □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Sol 	g Roots (i	Uwater-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)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	 □ Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Livin □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soi □ Stunted or Stressed Plants (D1) (L 	g Roots (i	Uwater-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)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algat Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery	□ Water-Stained Leaves (B9) (excep 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Livin □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soi	g Roots (i	□ Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface	□ Water-Stained Leaves (B9) (excep 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Livin □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soi	g Roots (i	□ Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (Sparsely Vegetated Concave Surface Field Observations:	☐ Water-Stained Leaves (B9) (excep 1, 2, 4A, and 4B) ☐ Salt Crust (B11) ☐ Aquatic Invertebrates (B13) ☐ Hydrogen Sulfide Odor (C1) ☐ Oxidized Rhizospheres along Livin ☐ Presence of Reduced Iron (C4) ☐ Recent Iron Reduction in Tilled Sol ☐ Stunted or Stressed Plants (D1) (L (B7) ☐ Other (Explain in Remarks) æ (B8)	g Roots (i	□ Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators: Primary Indicators (minimum of one requi □ 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 (Barriell Observations: Surface Water Present? Yes □	□ Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Livin □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Sol □ Stunted or Stressed Plants (D1) (L(B7)) □ Other (Explain in Remarks) □ (B8) No □ Depth (inches):	g Roots (i	□ Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Yes Water Table Present?	□ Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Livin □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soi □ Stunted or Stressed Plants (D1) (L(B7) □ Other (Explain in Remarks) □ (B8) No □ Depth (inches): □ □ Depth (inches): □ □ Depth (inches): □ □ Depth (inches): □ □ Depth (inches): □ Depth (inches): □ □ Depth (inches): □ Depth (inch	g Roots (i	□ Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (Barriage Surface Surface Surface Surface Surface Surface Surface Surface Water Present? Water Table Present? Yes Saturation Present? Yes	□ Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soi Stunted or Stressed Plants (D1) (L87) □ Other (Explain in Remarks) □ Bepth (inches): No □ Depth (inches):	g Roots (des (C6) RR A)	Uwater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (G2) □ Saturation Visible on Aerial Imagery (C9) C3) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (Barriage Surface Surface Surface Surface Surface Surface Surface Surface Water Present? Water Table Present? Yes Saturation Present? Yes	□ Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Livin □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soi □ Stunted or Stressed Plants (D1) (L(B7) □ Other (Explain in Remarks) □ (B8) No □ Depth (inches): □ □ Depth (inches): □ □ Depth (inches): □ □ Depth (inches): □ □ Depth (inches): □ Depth (inches): □ □ Depth (inches): □ Depth (inch	g Roots (des (C6) RR A)	Uwater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (G2) □ Saturation Visible on Aerial Imagery (C9) C3) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (Barriage Surface Surface Surface Surface Surface Surface Surface Surface Water Present? Water Table Present? Yes Saturation Present? Yes	□ Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soi Stunted or Stressed Plants (D1) (L87) □ Other (Explain in Remarks) □ Bepth (inches): No □ Depth (inches):	g Roots (des (C6) RR A)	Uwater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (G2) □ Saturation Visible on Aerial Imagery (C9) C3) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (Barriage Surface Surface Surface Surface Surface Surface Surface Surface Water Present? Water Table Present? Yes Saturation Present? Yes	□ Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soi Stunted or Stressed Plants (D1) (L87) □ Other (Explain in Remarks) □ Bepth (inches): No □ Depth (inches):	g Roots (des (C6) RR A)	Uwater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (G2) □ Saturation Visible on Aerial Imagery (C9) C3) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Yes □ Water Table Present? Yes □ Saturation Present? Yes □ (includes capillary fringe) Describe Recorded Data (stream gauge,	□ Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soi Stunted or Stressed Plants (D1) (L87) □ Other (Explain in Remarks) □ Bepth (inches): No □ Depth (inches):	g Roots (des (C6) RR A)	Uwater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (G2) □ Saturation Visible on Aerial Imagery (C9) C3) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Yes □ Water Table Present? Yes □ Saturation Present? Yes □ (includes capillary fringe) Describe Recorded Data (stream gauge,	□ Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soi Stunted or Stressed Plants (D1) (L87) □ Other (Explain in Remarks) □ Bepth (inches): No □ Depth (inches):	g Roots (des (C6) RR A)	Uwater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (G2) □ Saturation Visible on Aerial Imagery (C9) C3) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region Project/Site: Lindshier Ave City/County: Bellingham Sampling Date: 5/4/22 Applicant/Owner: Cool Runnings Construction State: Wy Sampling Point: 0P-3 Investigator(s): E.Miller Section, Township, Range: 16 /32 W / 02. E Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): com(au) Slope (%): O Subregion (LRR): Lat: Long: Datum: NWI classification: Poly O Soil Map Unit Name: 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 _____ 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 X No 🗆 Is the Sampled Area Hydric Soil Present? Yes 🗷 No 🗌 within a Wetland? Yes ☑ No □ Wetland Hydrology Present? Yes ⊠ No 🗆 Remarks: wella B VEGETATION - Use scientific names of plants. Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: ___ % Cover Species? Status Number of Dominant Species 90 V That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species (OO) (A/B) = Total Cover That Are OBL, FACW, or FAC: Sapling/Shrub Stratum (Plot size:) Prevalence Index worksheet: 2._____ Total % Cover of: Multiply by: OBL species _____ x 1 = ____ FACW species ____ ____ x2=____ FAC species _____ x 3 = ____ FACU species _____ x 4 = ____ = Total Cover Herb Stratum (Plot size: ____) UPL species _____ x 5 = ___ Column Totals: _____ (A) _____ (B) 3. _____ Prevalence Index = B/A = 4._____ Hydrophytic Vegetation Indicators: ☐ Rapid Test for Hydrophytic Vegetation Dominance Test is >50% □ Prevalence Index is ≤3.0¹ ☐ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Wetland Non-Vascular Plants¹ 10. ☐ Problematic Hydrophytic Vegetation¹ (Explain) 1 Indicators of hydric soil and wetland hydrology must _ = Total Cover be present, unless disturbed or problematic. Woody Vine Stratum (Plot size:)

____ = Total Cover

Remarks:

% Bare Ground in Herb Stratum VOD

Yes X No 🗆

Hydrophytic Vegetation

Present?

Sampling Point: 150-3

	pth needed to document the Indicator or co	offirm the absence of indicators.)
Depth Matrix	Redox Features	j
(inches) Color (moist) %	Color (moist) % Type¹ Loc	Texture Remarks
0-12 10-1/2/2	(0 1 kg 1 2	
12-16 10-12-1/2.	10-18-314 15 C M	5.14-loan
., ,		
Truce: C=Concentration, D=Depletion, RI	M=Reduced Matrix, CS=Covered or Coated Sar	nd Grains. ² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to a	il LRRs, unless otherwise noted.)	Illulcators for Frontendale Hydrio dono 1
☐ Histosol (A1)	☐ Sandy Redox (S5)	☐ 2 cm Muck (A10)
☐ Histic Epipedon (A2)	☐ Stripped Matrix (S6)	Red Parent Material (TF2)
☐ Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLR	A 1)
☐ Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	F1 Office (exhign at tremetus)
Depleted Below Dark Surface (A11)	☐ Depleted Matrix (F3) *★ Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and
☐ Thick Dark Surface (A12) ☐ Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):		
Type:		
Depth (inches):		Hydric Soll Present? Yes 🔼 No 🗆
Remarks:		
		-
HYDROLOGY		
Wetland Hydrology Indicators:	and shook all that apply)	Secondary Indicators (2 or more required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requi	red; check all that apply)	Secondary Indicators (2 or more required) HMIRA F1 Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators: Primary Indicators (minimum of one requi	☐ Water-Stained Leaves (B9) (except	t MLRA Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2)	☐ Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B)	t MLRA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requi ☐ Surface Water (A1) ☐ High Water Table (A2) ☐ Saturation (A3)	☐ Water-Stained Leaves (B9) (except1, 2, 4A, and 4B)☐ Salt Crust (B11)	t MLRA Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators: Primary Indicators (minimum of one requi ☐ Surface Water (A1) ☐ High Water Table (A2) ☐ Saturation (A3) ☐ Water Marks (B1)	☐ Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) ☐ Salt Crust (B11) ☐ Aquatic Invertebrates (B13) ☐ Hydrogen Sulfide Odor (C1)	t MLRA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requi ☐ Surface Water (A1) ☐ High Water Table (A2) ☐ Saturation (A3) ☐ Water Marks (B1) ☐ Sediment Deposits (B2)	☐ Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) ☐ Salt Crust (B11) ☐ Aquatic Invertebrates (B13) ☐ Hydrogen Sulfide Odor (C1)	t MLRA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	□ Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Roots (C3) Shallow Aquitard (D3)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	□ Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living Presence of Reduced Iron (C4)	t MLRA ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ☐ Drainage Patterns (B10) ☐ Dry-Season Water Table (C2) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Roots (C3) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	□ Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soil	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	□ Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soli	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requil 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 (Base)	□ Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soil □ Stunted or Stressed Plants (D1) (LI	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) RR A) □ Reised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requil 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 (B5) Sparsely Vegetated Concave Surface	□ Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soil □ Stunted or Stressed Plants (D1) (LI	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) RR A) □ Reised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B1) Sparsely Vegetated Concave Surface Field Observations:	□ Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soil □ Stunted or Stressed Plants (D1) (Light) □ Other (Explain in Remarks) □ (B8)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) RR A) □ Reised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (Sparsely Vegetated Concave Surface Field Observations: Surface Water Present?	Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Stunted or Stressed Plants (D1) (Living Other (Explain in Remarks) (B8) No. Depth (inches):	t MLRA ☐ 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)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requil 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 (Barriage Vegetated Concave Surface Field Observations: Surface Water Present? Water Table Present? Yes Water Table Present?	Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soli Stunted or Stressed Plants (D1) (LI (B7) Other (Explain in Remarks) (B8) Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) RR A) □ Reised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requil 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 (Batter) Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Water Table Present? Yes □ Saturation Present? Yes □ Yes □ Yes □ Yes □ Yes □ Yes □	□ Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soil Stunted or Stressed Plants (D1) (LI (B7) □ Other (Explain in Remarks) ○ (B8) No. □ Depth (inches): □ □ □ Depth (inches): □ □ □	t MLRA
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WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region Project/Site: Lindshier Ave City/County: Ballingham Sampling Date: 5/4/22 Applicant/Owner: Cool Running: Construction State: WM Sampling Point: OP-4 Investigator(s): E.Miller Section, Township, Range: 16 /32 W / 02 F Landform (hillslope, terrace, etc.): dep. Local relief (concave, convex, none): Compared Slope (%): O Subregion (LRR): Lat: Long: Dalum: NWI classification: p 5 5 Soil Map Unit Name: 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 IZK No □ Is the Sampled Area Hydric Soil Present? Yes ⊠ No 🗆 within a Wetland? Yes ☑ No □ Wetland Hydrology Present? Yes 🔼 No 🗆 Remarks: togong sho VEGETATION - Use scientific names of plants. Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size:) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: **Total Number of Dominant** Species Across All Strata: Percent of Dominant Species = Total Cover That Are OBL, FACW, or FAC: くびら (A/B) Sapling/Shrub Stratum (Plot size: ____) 1. Acur is 100 V Fac Prevalence Index worksheet: 2.______ Total % Cover of: Multiply by: 3.______ OBL species _____ x 1 = ____ FACW species _____ x 2 = ____ FAC species _____ x 3 = ____ _____ = Total Cover FACU species _____ x 4 = ____ Herb Stratum (Plot size: ____) UPL species _____ x 5 = ____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = 4._____ **Hydrophytic Vegetation Indicators:** ☐ Rapid Test for Hydrophytic Vegetation Dominance Test is >50% ☐ Prevalence Index is ≤3.01 ☐ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 10.____ ☐ Wetland Non-Vascular Plants¹ ☐ Problematic Hydrophytic Vegetation¹ (Explain) Indicators of hydric soil and wetland hydrology must ____ = Total Cover

_____ = Total Cover

Remarks:

Woody Vine Stratum (Plot size:)

% Bare Ground in Herb Stratum _____

Yes⊠ No 🗆

be present, unless disturbed or problematic.

Hydrophytic Vegetation

Present?

Sampling Point: 10-4

	withtom (Bessie	s to the de	pth needed to docum	Uetif file ilinicato	r or constru	the absence of Indicators.)
Depth	Matrix		Redo Color (moist)	x Features % Type ¹	Loc ²	Texture Remarks
(inches)	Color (moist)					\nau_
0-8	10-10-3/2		VII			Sandy locum
8-16	2,514/2	_ 	10/15/19	<u> </u>	_w_	Saray locus
					·	
¹ Type: C=0	Concentration, D=De	pletion, RI	M=Reduced Matrix, CS	S=Covered or Coa	ited Sand Gr	rains. ² Location: PL=Pore Lining, M=Matrix.
Hydric Sol	I Indicators: (Appli	cable to a	III LRRs, unless othe	rwise noted.)		Illulcators for Problematic Hydric cons r
☐ Histoso			Sandy Redox (S	35)		☐ 2 cm Muck (A10)
	pipedon (A2)		Stripped Matrix	(S6)		Red Parent Material (TF2)
☐ Black H	listic (A3)		☐ Loamy Mucky N		pt MLRA 1)	☐ Very Shallow Dark Surface (TF12)☐ Other (Explain in Remarks)
	en Sulfide (A4)		Loamy Gleyed I			C Otto (Exhibit at 120 tions)
	ed Below Dark Surfa	ce (A11)	Depleted Matrix Redox Dark Sur			3Indicators of hydrophytic vegetation and
	Park Surface (A12) Mucky Mineral (S1)		Depleted Dark S			wetland hydrology must be present,
_	Gleyed Matrix (S4)		Redox Depress			unless disturbed or problematic.
	Layer (if present):					
Type:	22301 (11					
Deoth (i	nches):					Hydric Soil Present? Yes 🔼 No 🗌
Remarks:	-					
HYDROL						
	lydrology Indicator	e.				
Primary Inc					· <u> </u>	Opendors Indicators (2 or more required)
	dicators (minimum o		ired; check all that app			Secondary Indicators (2 or more required)
☐ Surface	<u>dicators (minimum o</u> e Water (A1)		☐ Water-Sta	ineđ Leaves (B9)	(except MLI	RA Water-Stained Leaves (B9) (MLRA 1, 2,
			☐ Water-Sta 1, 2, 4	ined Leaves (B9) A, and 4B)	(except MLI	RA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
	e Water (A1) /ater Table (A2)		☐ Water-Sta 1, 2, 4 ☐ Salt Crust	ined Leaves (89) A, and 4B) (B11)		RA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
☐ High W ☐ Satural ☐ Water	e Water (A1) /ater Table (A2) tion (A3) Marks (B1)		☐ Water-Sta 1, 2, 4 ☐ Salt Crust ☐ Aquatic In	ined Leaves (B9) A, and 4B) (B11) vertebrates (B13)		RA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2)
☐ High W ☐ Satural ☐ Water ☐ ☐ Sedime	e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)		☐ Water-Sta 1, 2, 4 ☐ Salt Crust ☐ Aquatic In ☐ Hydrogen	ined Leaves (B9) A, and 4B) (B11) vertebrates (B13) Sulfide Odor (C1)	ı	RA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9
High W Satural Water Sedime Drift Da	e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)		☐ Water-Sta 1, 2, 4 ☐ Salt Crust ☐ Aquatic In ☐ Hydrogen ☐ Oxidized I	ined Leaves (B9) A, and 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres alor) ng Living Roo	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Dts (C3)
High W Satural Water Sedime Drift De	e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Vat or Crust (B4)		☐ Water-Sta 1, 2, 4 ☐ Salt Crust ☐ Aquatic In ☐ Hydrogen ☐ Oxidized I	ined Leaves (B9) A, and 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres alor of Reduced Iron () ng Living Roo C4)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
High W Saturai Water Sedime Drift Da Algal M	e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5)		☐ Water-Sta 1, 2, 4 ☐ Salt Crust ☐ Aquatic In ☐ Hydrogen ☐ Oxidized I ☐ Presence ☐ Recent Iro	ined Leaves (B9) A, and 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres alor of Reduced Iron (on Reduction In Til) ng Living Roo C4) Iled Solls (C6	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
High W Satural Water SedIme Drift De Algal M Iron De Surface	e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) e Soil Cracks (B6)	f one regul	☐ Water-Sta 1, 2, 4 ☐ Salt Crust ☐ Aquatic In ☐ Hydrogen ☐ Oxidized I ☐ Presence ☐ Recent Irc ☐ Stunted o	ined Leaves (B9) A, and 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres alor of Reduced Iron (on Reduction In Til r Stressed Plants) ng Living Roo (C4) lled Solls (C6 (D1) (LRR A	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
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High W Satural Water Sedime Drift De Algal M Iron De Surface Inunda Sparse Surface W	e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) e Soil Cracks (B6) ation Visible on Aeria ervations: /ater Present?	fone requi	□ Water-Sta 1, 2, 4 □ Salt Crust □ Aquatic In □ Hydrogen □ Oxidized I □ Presence □ Recent Irc □ Stunted o (B7) □ Other (Exect B8)	ined Leaves (89) A, and 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres alor of Reduced Iron (on Reduction In Til r Stressed Plants plain in Remarks)	ng Living Roo C4) Iled Solls (C6 (D1) (LRR A	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Ots (C3) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
High W Satural Water Sedime Drift De Algal M Iron De Surface Inunda Sparse Field Obs Surface W Water Tab	e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) e Soil Cracks (B6) ation Visible on Aeria ervations: /ater Present?	one requi Il Imagery Inve Surface Yes ☐ Yes ☐	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Irc Stunted o (B7) Other (Ex	ined Leaves (89) A, and 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres alor of Reduced Iron (on Reduction In Til r Stressed Plants plain in Remarks)	ng Living Roo C4) Iled Solls (C6 (D1) (LRR A	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
High W Satural Water Sedime Drift De Inon De Surface Inunda Sparse Field Obs Surface W Water Tab	e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) e Soil Cracks (B6) ation Visible on Aeria ervations: /ater Present? Deposits (B5)	Il Imagery ave Surface Yes Yes Yes Yes Yes Yes	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Irc Stunted o (B7) Other (Ex (B8) Depth (inche	ined Leaves (B9) A, and 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres alor of Reduced Iron (on Reduction In Til r Stressed Plants plain in Remarks) as):	g Living Roo C4) lled Soils (C6 (D1) (LRR A	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
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WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Live Shi	66 WAS		_City/County: <u>は</u>	Minichan Sampling Date: 5 4 2
Applicant/Owner: Cool &v	inninge Con	sedruci	-10-2	State: WY- Sampling Point: 120-5
Investigator(s): といいい	6(~	Section,	Township, Range: 16 /32 N /03 F
Landform (hillslope, terrace, etc.):	dip		Local relief (concav	ve, convex, none): (o v c a ve Slope (%): O
Subregion (LRR):		Lat:		Long: Detum:
Soil Map Unit Name:				NWI classification: PSS
Are climatic / hydrologic conditions	on the site typical for th	is time of ye	ar? Yes ☑ No ☐	(If no. explain in Remarks)
kre Vegetation, Soil, o				ormal Circumstances" present? Yes ☑ No □
re Vegetation Soil o				ed, explain any answers in Remarks.)
				locations, transects, important features, etc
Hydrophytic Vegetation Present?	Yes 🔀 No 🛘			
Hydric Soil Present?	Yes 💢 No 🗆		Is the Sample	
Wetland Hydrology Present?	Yes 🖟 No 🛘		within a wett	and? Yes ☑ No □
Remarks:	welland	<i>v</i> ,		
EGETATION – Use scient	ific names of plan	ts.	- Ton	
Tree Stratum (Plot size:)		Absolute	Dominant Indicator	Dominance Test worksheet:
1			Species? Status	Number of Dominant Species
2.				That Are OBL, FACW, or FAC: (A)
				Total Number of Dominant L Species Across All Strata: (B)
				oposico visitos vili otraca.
			= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
Sapting/Shrub Stratum (Plot size:		Ø 89	/ 0 .	
Russia Co		<u> </u>	-fac	Prevalence Index worksheet:
Rubue sp		70	TAC.	Total % Cover of: Multiply by:
-				OBL species x1=
				FACW species x 2 = FAC species x 3 =
			= Total Cover	FACU species x 4 =
erb Stratum (Plot size:)	_		/ "	UPL species x 5 =
Ramentus	<u>re</u>	10	1 tac	Column Totals: (A) (B)
Athyrium	76	_\U_	V tac	j
•				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
				Rapid Test for Hydrophytic Vegetation Dominance Test is >50%
	•			☐ Prevalence Index is ≤3.0 ¹
		•		☐ Morphological Adaptations¹ (Provide supporting
				data in Remarks or on a separate sheet)
				☐ Wetland Non-Vascular Plants¹
•				☐ Problematic Hydrophytic Vegetation¹ (Explain)
oody Vine Stratum (Plot size:	_)		= Total Cover	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Hydrophytic
•				Vegetation .
Bare Ground in Herb Stratum			= Total Cover	Present? Yes No 🗆

Sampling Point: 5P-5

Profile Description: (Describe to the	depth needed to document the indicator (or confirm the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (molst) %	Color (moist) % Type ¹	•
0-6 10/12/1		loan
6-16 10-12-12	101R314 (SC	m 5,14 loan
6-10 (0.14-		
		The state of the s
2.2		
		2. C. Di Dan Chian Maddelin
¹ Type: C=Concentration, D=Depletion,	RM=Reduced Matrix, CS=Covered or Coate	ed Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Solis ³ :
Hydric Soil Indicators: (Applicable to		
☐ Histosol (A1)	Sandy Redox (S5)	☐ 2 cm Muck (A10) ☐ Red Parent Material (TF2)
☐ Histic Epipedon (A2)	☐ Stripped Matrix (S6)	——————————————————————————————————————
☐ Black Histic (A3)	Loamy Mucky Mineral (F1) (except	Other (Explain in Remarks)
☐ Hydrogen Sulfide (A4) ☐ Depleted Below Dark Surface (A11)	☐ Loamy Gleyed Matrix (F2)	- Anna I-dament
☐ Thick Dark Surface (A12)	Redox Dark Surface (F6)	3Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Mucky Interest (51)	Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):		
Туре:		
Depth (inches):		Hydric Soil Present? Yes 🗗 No □
Remarks:		
LIVEROL OCV		
HYDROLOGY		
Wetland Hydrology Indicators:	avisad shock all that analy)	Secondary Indicators (2 or more required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one rec	nuired; check all that apply)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators: Primary Indicators (minimum of one rec Surface Water (A1)	Water-Stained Leaves (B9) (e	except MLRA
Wetland Hydrology Indicators: Primary Indicators (minimum of one rec Surface Water (A1) High Water Table (A2)	☐ Water-Stained Leaves (B9) (e 1, 2, 4A, and 4B)	except MLRA
Wetland Hydrology Indicators: Primary Indicators (minimum of one rec ☐ Surface Water (A1) ☐ High Water Table (A2) ☐ Saturation (A3)	□ Water-Stained Leaves (B9) (e1, 2, 4A, and 4B)□ Salt Crust (B11)	except MLRA
Wetland Hydrology Indicators: Primary Indicators (minimum of one rec Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	 □ Water-Stained Leaves (B9) (e 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aqualic Invertebrates (B13) 	water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one rec Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	 □ Water-Stained Leaves (B9) (e 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) 	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators: Primary Indicators (minimum of one recompliance Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	 □ Water-Stained Leaves (B9) (e 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along 	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Living Roots (C3)
Wetland Hydrology Indicators: Primary Indicators (minimum of one recompliance Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	Water-Stained Leaves (89) (e	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Living Roots (C3) Shallow Aquitard (D3)
Wetland Hydrology Indicators: Primary Indicators (minimum of one recompliance) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	Water-Stained Leaves (89) (e	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Living Roots (C3) □ Shallow Aquitard (D3) □ SAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one recompliance) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	Water-Stained Leaves (89) (e	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Living Roots (C3) Secomorphic Position (D2) Head Soils (C6) FAC-Neutral Test (D5) C1) (LRR A) Raised Ant Mounds (D6) (LRR A)
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Wetland Hydrology Indicators: Primary Indicators (minimum of one rec 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 Imager Sparsely Vegetated Concave Surface	Water-Stained Leaves (89) (e	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Living Roots (C3) Secomorphic Position (D2) Head Soils (C6) FAC-Neutral Test (D5) C1) (LRR A) Raised Ant Mounds (D6) (LRR A)
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Wetland Hydrology Indicators: Primary Indicators (minimum of one recompliance) 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 Imager Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Water Table Present? Yes Saturation Present? Yes And Are	Water-Stained Leaves (B9) (e	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) Living Roots (C3) □ Geomorphic Position (D2) 4) □ Shallow Aquitard (D3) ad Soils (C6) □ FAC-Neutral Test (D5) D1) (LRR A) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7) Wetland Hydrology Present? Yes 🔼 No □
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Wetland Hydrology Indicators: Primary Indicators (minimum of one recompliance) 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 Imager Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Water Table Present? Yes Saturation Present? Yes And Are	Water-Stained Leaves (89) (e 1, 2, 4A, and 4B) Salt Crust (B11) Aqualic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C4) Recent Iron Reduction in Tille Stunted or Stressed Plants (D y (B7) Other (Explain in Remarks) No Depth (inches): No Depth (inches): Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) Living Roots (C3) □ Geomorphic Position (D2) 4) □ Shallow Aquitard (D3) ad Soils (C6) □ FAC-Neutral Test (D5) D1) (LRR A) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7) Wetland Hydrology Present? Yes 🔼 No □
Wetland Hydrology Indicators: Primary Indicators (minimum of one recompliance) 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 Imager Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream gaug	Water-Stained Leaves (89) (e 1, 2, 4A, and 4B) Salt Crust (B11) Aqualic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C4) Recent Iron Reduction in Tille Stunted or Stressed Plants (D y (B7) Other (Explain in Remarks) No Depth (inches): No Depth (inches): Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) Living Roots (C3) □ Geomorphic Position (D2) 4) □ Shallow Aquitard (D3) ad Soils (C6) □ FAC-Neutral Test (D5) D1) (LRR A) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7) Wetland Hydrology Present? Yes 🔼 No □
Wetland Hydrology Indicators: Primary Indicators (minimum of one recompliance) 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 Imager Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream gaug	Water-Stained Leaves (89) (e 1, 2, 4A, and 4B) Salt Crust (B11) Aqualic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C4) Recent Iron Reduction in Tille Stunted or Stressed Plants (D y (B7) Other (Explain in Remarks) No Depth (inches): No Depth (inches): Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) Living Roots (C3) □ Geomorphic Position (D2) 4) □ Shallow Aquitard (D3) ad Soils (C6) □ FAC-Neutral Test (D5) D1) (LRR A) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7) Wetland Hydrology Present? Yes 🔼 No □

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

Project/Site: Lindshier Ave	_	City/6	County: 3e	State: LV Sampling Point: OP -
Applicant/Owner: Cool Runnings Co.	metruci	I.O.	~ ~	State: WA Sampling Boints OP 5
Investigator(s): にいていして			Contina	*
Landform (hillslope, terrace, etc.):		Loca	el relief (concav	ve, convex, none): $\sqrt{0}$ Slope (%): 7
Subregion (LRR):	Lat:			Long:
Soil Map Unit Name:				MWI classification: PSS
Are climatic / hydrologic conditions on the site typical for t	his time of ve	ear? Y	es M No FI	//f no evoluin in Pemarka)
Are Vegetation, Soil, or Hydrology sign	ificantly dist	urbed?		ormal Circumstances* present? Yes 🕰 No □
Are Vegetation, Soil, or Hydrology natu				ed, explain any answers in Remarks.)
				locations, transects, important features, etc
Hydrophytic Vegetation Present? Yes ☑ No ☐				
Hydric Soil Present? Yes₁☑ No ☐		İ	is the Sample	
Wetland Hydrology Present? Yes ⊠ No □		- 1	within a Wetla	and? Yes 仄 No □
Remarks: wetland E				
		·-··		
VEGETATION – Use scientific names of plan	nts.			-
Tree Stratum (Plot size:)	Absolute % Cover		nant Indicator les? Status	Dominance Test worksheet:
1. Alnus ru	30	Spec	Fre Fre	Number of Dominant Species That Are OBL, FACW or FAC:
2. Thuja pol		V	Fac	(4)
3				Total Number of Dominant Species Across All Strata: 5 (B)
4				
Sapling/Shrub Stratum (Plot size:)		= Tot	tal Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
1. Ruber :	10	/	Ful	
2. Symphonica poo al	3		Fach	Prevalence Index worksheet:
3.			<u>wro</u> t	OBL species x 1 =
4				FACW species x2 =
5				FAC species x 3 =
Herb Stratum (Plot size:)		= Tota	al Cover	FACU species x 4 =
1. Rammanh & M	40	./	Έ.	UPL species x 5 =
2. Tolmera me	10		Fac	Column Totals: (A) (B)
3. Athyrium re	<u> 20</u>	_/	Fac	Prevalence Index = B/A =
4. Carex de	10		Tai	Hydrophytic Vegetation Indicators:
5				Rapid Test for Hydrophytic Vegetation
6				Dominance Test is >50%
7				☐ Prevalence Index is ≤3.01
3				☐ Morphological Adaptations¹ (Provide supporting
9				data in Remarks or on a separate sheet) Welland Non-Vascular Plants¹
10			··-	☐ Problematic Hydrophytic Vegetation¹ (Explain)
11				Indicators of hydric soil and wetland hydrology must
Noody Vine Stratum (Plot size:)			Cover	be present, unless disturbed or problematic.
			- 	Hydrophytic
				Vegetation
6 Bare Ground in Herb Stratum		- 10(a)	Ouver	Present? Yes ✓ No □
Remarks:				
				,

Sampling Point: 015-6

			Redo	x Feature	S		n the absence of indicators.)
Depth inches)	Matrix Color (molst)		Color (moist)	<u>%</u>	Type ¹	_Loc ²	Texture Remarks
2	10-16-5/5						loan
	2,57 5/2	-	107/24/4	7.0	<u> </u>	٠٨٨	Sandy loan
3-16	2,51-12		(0 1/2 1/4				
-,							
ype: C=0	Concentration, D=D	epletion, RM:	=Reduced Matrix, C	S=Covere	d or Coate	ed Sand G	rains. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :
ydric Sol	I Indicators: (Appl	icable to all	LRRs, unless office	erwise not	ea.j		☐ 2 cm Muck (A10)
] Histoso			☐ Sandy Redox (Red Parent Material (TF2)
	pipedon (A2)		☐ Stripped Matrix	((S6) Mineral (E)	1) /avaan	11 AC 185	
	listic (A3)		Loamy Mucky			(IIIEIOA I)	Other (Explain in Remarks)
	en Sulfide (A4)	nn /A44\	☐ Loamy Gleyed☐ Depleted Matri		.,		week with the second of the second
	ed Below Dark Surfa Park Surface (A12)	ice (ATT)	Redox Dark St		ı		3Indicators of hydrophytic vegetation and
	Mucky Mineral (S1)		☐ Depleted Dark				wetland hydrology must be present,
	Mucky Mineral (31) Gleyed Matrix (S4)		☐ Redox Depres		•		unless disturbed or problematic.
	Layer (if present)	:					
Type:							
	inches):						
	monocy.						Hydric Soil Present? Yes Ø No □
Remarks:	OGY						Hydric Soil Present? Yes pz. No L.1
Remarks: YDROL Wetland F	OGY lydrology Indicato	rs:		olv)			
Remarks: YDROL Wetland F	OGY lydrology Indicato dicators (minimum c	rs:	ed; check all that ap	ply)	(nc /BQ) (avcent MI	Secondary Indicators (2 or more required)
YDROL Wetland F	OGY lydrology Indicato dicators (minimum c e Water (A1)	rs:	ed; check all that ap ☐ Water-St	ained Leav		except ML	Secondary Indicators (2 or more required) RA Water-Stained Leaves (B9) (MLRA 1,
YDROL Wetland F Primary In Surfac	OGY lydrology Indicator dicators (minimum c e Water (A1) Vater Table (A2)	rs:	ed; check all that ap ☐ Water-Sta	ained Leav 4A, and 41		except ML	Secondary Indicators (2 or more required) RA
YDROL Vetland F Primary In Surfac High V	OGY lydrology Indicator dicators (minimum c e Water (A1) Vater Table (A2) lion (A3)	rs:	ed; check all that ap ☐ Water-St 1, 2, 4 ☐ Salt Crus	ained Leav 4A, and 4E st (B11)	3)	except ML	Secondary Indicators (2 or more required) RA
YDROL Vetland F Primary In Surfac High V	OGY lydrology Indicator dicators (minimum o e Water (A1) Vater Table (A2) tion (A3) Marks (B1)	rs:	ed; check all that ap Water-St 1, 2, 4 Salt Crus	ained Leav 4A, and 4E st (B11) nvertebrate	3) es (B13)	except ML	Secondary Indicators (2 or more required) RA
YDROL Vetland F Primary In Surfac High V Satura Water SedIm	OGY lydrology Indicator dicators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)	rs:	ed; check all that ap Water-St 1, 2, 4 Salt Crus Aquatic li	ained Leav 4A, and 4I st (B11) nvertebrate n Sulfide C	3) es (B13) odor (C1)		Secondary Indicators (2 or more required) RA
YDROL Vetland F Gimary In Surfac High V J Satura Water SedIm Drift D	OGY lydrology Indicator dicators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)	rs:	ed; check all that ap Water-St 1, 2, 4 Sait Crus Aquatic li Hydrogei Oxidized	ained Leav 4A, and 4I st (B11) nvertebrate n Sulfide C Rhizosphe	3) es (B13) odor (C1) eres along	Living Ro	Secondary Indicators (2 or more required) RA
YDROL Wetland F Frimary In Surfac High W D Satura Water SedIm Drift D Algal M	OGY lydrology Indicator dicators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4)	rs:	ed; check all that ap Water-St 1, 2, 4 Sait Crus Aquatic li Hydrogei Oxidized	ained Leav 4A, and 44 t (B11) nvertebrate n Sulfide C Rhizosphe e of Reduc	a) es (B13) odor (C1) eres along ed Iron (C	Living Ro	Secondary Indicators (2 or more required) RA
YDROL Vetland F Primary In Surfac High V Satura Water SedIm Drift D Algal N	OGY lydrology Indicator dicators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5)	rs:	ed; check all that ap Water-St 1, 2, 4 Salt Crus Aquatic li Hydroger Oxidized Presence	ained Leav 4A, and 4I 4 (811) nvertebrate n Sulfide C Rhizosphe e of Reduct con Reduct	as (B13) Odor (C1) Beres along ed Iron (C Non in Tille	Living Ro 4) ed Soils (C	Secondary Indicators (2 or more required) RA
YDROL Vetland F Primary In Surfac High W Satura Water SedIm Drift D Algal N	OGY Iydrology Indicator dicators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6)	rs: one require	ed; check all that ap Water-St 1, 2, 4 Salt Crus Aquatic li Hydrogei Oxidized Presence Recent li	ained Leav 4A, and 4E of (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct or Stressed	as (B13) dor (C1) deres along ed Iron (C lion in Tille d Plants (I	Living Ro 4) ed Soils (C	Secondary Indicators (2 or more required) RA
YDROL Vetland F Primary In Surfac High V Satura Water Sedim Drift D Algal N Iron D	OGY Iydrology Indicator dicators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) atton Visible on Aeric	rs: of one require	ed; check all that ap Water-St 1, 2, 4 Salt Crus Aquatic li Hydroger Oxidized Presence Recent li Stunted 6	ained Leav 4A, and 4E of (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct or Stressed	as (B13) dor (C1) deres along ed Iron (C lion in Tille d Plants (I	Living Ro 4) ed Soils (C	Secondary Indicators (2 or more required) RA
YDROL Wetland F Primary In Surfac High W Satura Water SedIm Drift D Algal M Iron D Surfac	OGY lydrology Indicator dicators (minimum of e Water (A1) Vater Table (A2) lion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) ation Visible on Aeric ely Vegetated Conc	rs: of one require	ed; check all that ap Water-St 1, 2, 4 Salt Crus Aquatic li Hydroger Oxidized Presence Recent li Stunted 6	ained Leav 4A, and 4E of (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct or Stressed	as (B13) dor (C1) deres along ed Iron (C lion in Tille d Plants (I	Living Ro 4) ed Soils (C	Secondary Indicators (2 or more required) RA
YDROL Wetland F Primary In Surfac High V Water Sedim Drift D Algal N Iron D Surfac Inunda Sparse	OGY Iydrology Indicator dicators (minimum of the Water (A1) Vater Table (A2) Itlon (A3) Marks (B1) tent Deposits (B2) teposits (B3) Mat or Crust (B4) teposits (B5) teposits (B5) teposits (B6)	rs: of one required al Imagery (B ave Surface (ed; check all that ap Water-St. 1, 2, 4 Salt Crus Aquatic li Hydroger Oxidized Presence Recent lr Stunted 6 (87) Other (E:	ained Leav 4A, and 4I of (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct or Stressed xplain in R	es (B13) Dodor (C1) Bres along ed Iron (C Blon in Tille d Plants (I emarks)	Living Ro 4) ed Soils (C	Secondary Indicators (2 or more required) RA
YDROL Wetland F Primary In Surface High W Al Satura Water SedIm Drift D Algal N Iron D Surface Inunda Inunda Sparse Field Obs	OGY lydrology Indicator dicators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) eition Visible on Aeric ely Vegetated Concervations: Vater Present?	rs: If one require In languagery (Bave Surface (ed; check all that ap Water-St 1, 2, 4 Salt Crus Aquatic li Hydrogei Oxidized Presence Recent li Stunted 6 37) Other (E:	ained Leav 4A, and 4I it (B11) invertebrate in Sulfide C Rhizosphie of Reduct ion Reduct or Stressed xplain in R	es (B13) Ddor (C1) Bres along ed Iron (C Blon in Tille d Plants (I emarks)	Living Ro 4) ed Soils (C	Secondary Indicators (2 or more required) RA
YDROL Wetland F Frimary In Surface High W Al Satura SedIm Orift D Iron D	OGY lydrology Indicator dicators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) ation Visible on Aeric ely Vegetated Conce	rs: of one require al Imagery (B ave Surface (Yes □ N Yes ☑, N	ed; check all that ap Water-St	ained Leav 4A, and 4I of (B11) nivertebrate in Sulfide C Rhizosphe of Reduct on Reduct or Stressed xplain in R es):	es (B13) Ddor (C1) Bres along ed Iron (C Blon in Tille d Plants (I emarks)	Living Ro (4) ed Soils (C (1) (LRR A	Secondary Indicators (2 or more required) RA
YDROL Wetland F Primary In Surface High W Al Satura Drift D Algal N Iron D Surface Inunda Inunda Sparse Field Obs Surface W Water Tat Saturation	OGY lydrology Indicator dicators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) eition Visible on Aeric ely Vegetated Conce	rs: of one require al Imagery (B ave Surface (Yes □ N Yes ☑ N	ed; check all that ap Water-St 1, 2, 4 Salt Crus Aquatic li Hydroger Oxidized Presence Recent li Stunted 6 37) Other (E: (B8)	ained Leav 4A, and 4E 4 (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct ron Reduct or Stressee xolain in R es): es):	es (B13) dor (C1) eres along ed Iron (C tion in Tille d Plants (I emarks)	Living Ro (4) ed Soils (C O1) (LRR A	Secondary Indicators (2 or more required) RA
YDROL Vetland F Primary In Surface High V Satura High V Satura Sedim I ron D Surface I nunda Sparss Field Obs Surface W Water Tat Saturation	OGY lydrology Indicator dicators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) ation Visible on Aeric ely Vegetated Conce	rs: of one require al Imagery (B ave Surface (Yes □ N Yes ☑ N	ed; check all that ap Water-St 1, 2, 4 Salt Crus Aquatic li Hydroger Oxidized Presence Recent li Stunted 6 37) Other (E: (B8)	ained Leav 4A, and 4E 4 (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct ron Reduct or Stressee xolain in R es): es):	es (B13) dor (C1) eres along ed Iron (C tion in Tille d Plants (I emarks)	Living Ro (4) ed Soils (C O1) (LRR A	Secondary Indicators (2 or more required) RA
YDROL Vetland F Primary In Surface High V Satura Vater SedIm Iron D Surface Inunda Sparss Field Obs Sourface W Water Tat Saturation	OGY lydrology Indicator dicators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) eity Vegetated Conceevations: Vater Present? ole Present? a Present? capillary fringe) Recorded Data (stre	rs: of one require al Imagery (B ave Surface (Yes □ N Yes ☑ N	ed; check all that ap Water-St 1, 2, 4 Salt Crus Aquatic li Hydroger Oxidized Presence Recent li Stunted 6 37) Other (E: (B8)	ained Leav 4A, and 4E 4 (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct ron Reduct or Stressee xolain in R es): es):	es (B13) dor (C1) eres along ed Iron (C tion in Tille d Plants (I emarks)	Living Ro (4) ed Soils (C O1) (LRR A	Secondary Indicators (2 or more required) RA
emarks: /DROL Vetland F rimary In Surfac High V Satura Water SedIm Iron D Surfac Inunda Inunda Surface W Water Tat Saturation includes in	OGY lydrology Indicator dicators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) eity Vegetated Conceevations: Vater Present? ole Present? a Present? capillary fringe) Recorded Data (stre	rs: of one require al Imagery (B ave Surface (Yes □ N Yes ☑ N	ed; check all that ap Water-St 1, 2, 4 Salt Crus Aquatic li Hydroger Oxidized Presence Recent li Stunted 6 37) Other (E: (B8)	ained Leav 4A, and 4E 4 (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct ron Reduct or Stressee xolain in R es): es):	es (B13) dor (C1) eres along ed Iron (C tion in Tille d Plants (I emarks)	Living Ro (4) ed Soils (C O1) (LRR A	Secondary Indicators (2 or more required) RA

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region Project/Site: Lindshier Ave City/County: Bellinghon Sampling Date: 5/4/22 Applicant/Owner: Cool Bunnings Construction State: Wy Sampling Point: DP-7 Investigator(s): E.Miller Section, Township, Range: 16 /32 W/03 F Landform (hillstope, terrace, etc.): dep Local relief (concave, convex, none): Concave Stope (%): O Soil Map Unit Name: _____ NWI classification: FFO 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. Yes 🗵 No 🗆 Hydrophytic Vegetation Present? Is the Sampled Area Hydric Soil Present? Yes ☑ No 🗆 within a Wetland? Yes X No □ Wetland Hydrology Present? Yes ☑ No 🗆 Remarks: in Row VEGETATION – Use scientific names of plants. Absolute Dominant Indicator Absolute Species? Status 70 Dominance Test worksheet: Tree Stratum (Plot size: ___ Number of Dominant Species 1. Populus That Are OBL, FACW, or FAC: (A) Total Number of Dominant Species Across All Strata: Percent of Dominant Species = Total Cover 100 That Are OBL, FACW, or FAC: (A/B) Sapling/Shrub Stratum (Plot size: 1. Spraen do Prevalence Index worksheet: 2. Louicera in 30 V Total % Cover of: Multiply by: 3. 12-cer ci OBL species _____ x1=___ FACW species _____ x 2 = ____ FAC species _____ x3=___ ≈ Total Cover FACU species _____ x 4 = ____ Herb Stratum (Plot size:) UPL species _____ x 5 = ____ Column Totals: _____ (A) ____ (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: ☐ Rapid Test for Hydrophytic Vegetation Dominance Test is >50% 7. ______ Prevalence Index is ≤3.0¹ ☐ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Wetland Non-Vascular Plants¹ 10. ☐ Problematic Hydrophytic Vegetation¹ (Explain) Indicators of hydric soil and wetland hydrology must ____ = Total Cover be present, unless disturbed or problematic. Woody Vine Stratum (Plot size:) Hydrophytic Vegetation _____ = Total Cover Present? Yes 🔯 No 🗌 % Bare Ground in Herb Stratum ____ Remarks:

Sampling Point: <u>SP</u>7

Profile Description: (Describe to the d	epth needed to document the mail	MICH OF COLLECT	, 110 11-0-11-0
	Redox Features		
Depth Matrix	Color (moist) % Ty	pe ¹ Loc ²	Texture Remarks
1/591-1			10a m
	104104/6 20 C	w	and low
6-16 2.51 5/2	(0 (10 .8 _ 20 _ C		
			
			The second secon
			
¹ Type: C=Concentration, D=Depletion, R	M=Reduced Matrix, CS=Covered or	Coated Sand Gr	rains. ² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to	all LRRs, unless otherwise noted.)		Illufcators for Problematic Hydric cond i
☐ Histosol (A1)	☐ Sandy Redox (S5)		2 cm Muck (A10)
☐ Histic Epipedon (A2)	☐ Stripped Matrix (S6)		☐ Red Parent Material (TF2)
☐ Black Histic (A3)	Loamy Mucky Mineral (F1) (e	kcept MLRA 1)	☐ Very Shallow Dark Surface (TF12)
☐ Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)		☐ Other (Explain in Remarks)
☐ Depleted Below Dark Surface (A11)	Depleted Matrix (F3)		3Indicators of hydrophytic vegetation and
☐ Thick Dark Surface (A12)	Redox Dark Surface (F6)		welland hydrology must be present,
Sandy Mucky Mineral (S1)	☐ Depleted Dark Surface (F7) ☐ Redox Depressions (F8)		unless disturbed or problematic.
Sandy Gleyed Matrix (S4)	☐ Kedox peblessions (Lo)		
Restrictive Layer (if present):			•
Type: Depth (inches):			Hydric Soil Present? Yes 🔀 No □
Depin (inches)			Hydrio don't todate.
Remarks: /	•		
1			
LIVOROL OCV			
HYDROLOGY			
Wetland Hydrology Indicators:			Secondary Indicators (2 or more regulired)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requ	ilred; check all that apply)		Secondary Indicators (2 or more required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required):	☐ Water-Stained Leaves (39) (except MLI	RA Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators: Primary Indicators (minimum of one requ	☐ Water-Stained Leaves (1, 2, 4A, and 4B)	39) (except MLi	RA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requ			RA
Wetland Hydrology Indicators: Primary Indicators (minimum of one requirements Surface Water (A1) ✓ ☑ High Water Table (A2)	 □ Water-Stained Leaves (1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B 	13)	RA
Wetland Hydrology Indicators: Primary Indicators (minimum of one requestriance Water (A1) ✓ ☑ High Water Table (A2) ☑ Saturation (A3) ☐ Water Marks (B1) ☐ Sediment Deposits (B2)	 	13) (C1)	RA
Wetland Hydrology Indicators: Primary Indicators (minimum of one requestriance Water (A1) ✓ ☑ High Water Table (A2) ☑ Saturation (A3) ☐ Water Marks (B1)	☐ Water-Stained Leaves (1, 2, 4A, and 4B) ☐ Salt Crust (B11) ☐ Aquatic Invertebrates (B☐ Hydrogen Sulfide Odor ☐ Oxidized Rhizospheres	13) (C1) along Living Roo	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Dts (C3)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required): Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	☐ Water-Stained Leaves (1, 2, 4A, and 4B) ☐ Salt Crust (B11) ☐ Aquatic Invertebrates (B☐ Hydrogen Sulfide Odor ☐ Oxidized Rhizospheres ☐ Presence of Reduced In	13) (C1) along Living Roo on (C4)	RA
Wetland Hydrology Indicators: Primary Indicators (minimum of one requestriance Water (A1) ✓ Surface Water (A2) ✓ High Water Table (A2) ✓ Saturation (A3) ☐ Water Marks (B1) ☐ Sediment Deposits (B2) ☐ Drift Deposits (B3)	Water-Stained Leaves (13) (C1) along Living Roo on (C4) n Tilled Solls (C6	RA
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) ✓ Surface Water (A2) ✓ High Water Table (A2) ✓ Saturation (A3) ☐ Water Marks (B1) ☐ Sediment Deposits (B2) ☐ Drift Deposits (B3) ☐ Algal Mat or Crust (B4)	Water-Stained Leaves (13) (C1) along Living Roo on (C4) n Tilled Solls (C6 nls (D1) (LRR A	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) ols (C3) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requided Surface Water (A1) ✓ Surface Water (A2) ✓ Saturation (A3) ☐ Water Marks (B1) ☐ Sediment Deposits (B2) ☐ Drift Deposits (B3) ☐ Algal Mat or Crust (B4) ☐ Iron Deposits (B5)	☐ Water-Stained Leaves (1, 2, 4A, and 4B) ☐ Salt Crust (B11) ☐ Aquatic invertebrates (B) ☐ Hydrogen Sulfide Odor ☐ Oxidized Rhizospheres ☐ Presence of Reduced In ☐ Recent Iron Reduction I ☐ Stunted or Stressed Pla	13) (C1) along Living Roo on (C4) n Tilled Solls (C6 nls (D1) (LRR A	RA
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) ✓ Surface Water (A2) ✓ Saturation (A3) ☐ Water Marks (B1) ☐ Sediment Deposits (B2) ☐ Drift Deposits (B3) ☐ Algal Mat or Crust (B4) ☐ Iron Deposits (B5) ☐ Surface Soil Cracks (B6)	☐ Water-Stained Leaves (1, 2, 4A, and 4B) ☐ Salt Crust (B11) ☐ Aquatic invertebrates (Barrier of Early of Ea	13) (C1) along Living Roo on (C4) n Tilled Solls (C6 nls (D1) (LRR A	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) ols (C3) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A)
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Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) ✓ High Water Table (A2) ✓ Saturation (A3) ☐ Water Marks (B1) ☐ Sediment Deposits (B2) ☐ Drift Deposits (B3) ☐ Algal Mat or Crust (B4) ☐ Iron Deposits (B5) ☐ Surface Soil Cracks (B6) ☐ Inundation Visible on Aerial Imagery ☐ Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Water Table Present? Yes ☑ Saturation Present? Yes ☑	Water-Stained Leaves (1, 2, 4A, and 4B) Salt Crust (B11) Aquatic invertebrates (E Hydrogen Sulfide Odor Oxidized Rhizospheres Presence of Reduced Ir Recent Iron Reduction i Stunted or Stressed Pla (B7) □ Other (Explain in Rema	13) (C1) along Living Roo on (C4) n Tilled Soils (C6 nls (D1) (LRR A ks) Wel	AA, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
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Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Water Table Present? Yes X Saturation Present? Yes X (includes capillary fringe) Describe Recorded Data (stream gauge	Water-Stained Leaves (1, 2, 4A, and 4B) Salt Crust (B11) Aquatic invertebrates (E Hydrogen Sulfide Odor Oxidized Rhizospheres Presence of Reduced Ir Recent Iron Reduction i Stunted or Stressed Pla (B7) □ Other (Explain in Rema	13) (C1) along Living Roo on (C4) n Tilled Soils (C6 nls (D1) (LRR A ks) Wel	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Water Table Present? Yes X Saturation Present? Yes X (includes capillary fringe) Describe Recorded Data (stream gauge	Water-Stained Leaves (1, 2, 4A, and 4B) Salt Crust (B11) Aquatic invertebrates (E Hydrogen Sulfide Odor Oxidized Rhizospheres Presence of Reduced Ir Recent Iron Reduction i Stunted or Stressed Pla (B7) □ Other (Explain in Rema	13) (C1) along Living Roo on (C4) n Tilled Soils (C6 nls (D1) (LRR A ks) Wel	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

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

Project/Site: L\\A\S\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		_City/County: 🗟 ಒ	Million Date: 5 41
Applicant/Owner: Cool Runnings, Co.	<u>metruct</u>	40-	State: Why Sampling Date: 5 4 5 5 5 5 6 5 6 6 6 6 6 6 6 6 6 6 6 6
nvestigator(s): <u>E.Mille</u> で		Section,	Township, Range: 16 / 32 W / 02 F
andform (hillslope, terrace, etc.):		Local relief (concar	ve, convex, none): (sucant Slope (%): 3
ubregion (LRR):	Lat:	• • • • • • • • • • • • • • • • • • • •	Long: Datum:
oil Map Unit Name:			NWI classification: PSS
re climatic / hydrologic conditions on the site typical for t	his time of ve	ar? Yes l∀l No.□	If no evoluin in Remodul)
re Vegetation, Soil, or Hydrology sign	nificantly distr		
e Vegetation, Soil, or Hydrology natu			ormal Circumstances" present? Yes 🔼 No 🗌
		•	ed, explain any answers in Remarks.) : locations, transects, important features, etc
Hydrophytic Vegetation Present? Yes ☒ No ☐			, , , otto
lydric Soil Present? Yes 💟 No 🗆		is the Sample	
Vetland Hydrology Present? Yes ☑ No ☐		within a Wetla	and? Yes ଔ. No □
temarks: wet	und	+-1	
CCTATION II.			
GETATION – Use scientific names of pla		Damies I. P.	
ree Stratum (Plot size:)	Absolute <u>% Cover</u>	Dominant Indicator Species? Status	No. 1 and a second
			Number of Dominant Species That Are OBL, FACW, or FAC:(A)

			Total Number of Dominant Species Across All Strata: (B)
pling/Shrub Stratum (Plot size:)		= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
Louisera in	70	V. Fac	Prevalence Index worksheet:
Frangula pu.	1(2	Fac	Total % Cover of: Multiply by:
cratalins op	19	Tal	OBL species x 1 =
•			FACW species x2 =
		·	FAC species x 3 =
		= Total Cover	FACU species x4 =
rb Stratum (Plot size:) Phanis ar	6	V FucW	UPL species x 5 =
M055	70	v racw	Column Totals: (A) (B)
			Protesiana index - DIA
			Prevalence Index = B/A = Hydrophytic Vegetation Indicators:
			Rapid Test for Hydrophytic Vegetation
			Dominance Test is >50%
·			☐ Prevalence Index is ≤3.0¹
			☐ Morphological Adaptations¹ (Provide supporting
			data in Remarks or on a separate sheet)
	·		☐ Welland Non-Vascular Plants¹
			Problematic Hydrophytic Vegetation ¹ (Explain)
ody Vine Stratum (Plot size:)	· 	= Total Cover	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
·			Hydrophytic
		ŀ	Vegetation
	:	Total Cover	Present? Yes M No 🗆
are Ground in Herb Stratum		1	1

Sampling Point: $DC \sim 8$

	Dill liceded to document ma manage	
	pth needed to document the indicator or con	
Depth Matrix (inches) Color (moist) %	Color (moist) % Type ¹ Loc ²	Texture Remarks
0-10 10-18-312		S. H loan
	10-1/63/1 8 C m	6,1/4- loan
W16 W4R4/2.	10-10-1	
		was a second second of the sec
		d Grains. ² Location: PL=Pore Lining, M=Matrix.
Type: C=Concentration, D=Depletion, R	M=Reduced Matrix, CS=Covered or Coated San	Indicators for Problematic Hydric Solis ³ :
Hydric Soil Indicators: (Applicable to a	all LRRs, unless otherwise noted.)	Indicators in 111111111111
☐ Histosol (A1)	☐ Sandy Redox (S5)	☐ 2 cm Muck (A10) ☐ Red Parent Material (TF2)
☐ Histic Epipedon (A2)	☐ Stripped Matrix (S6)	
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1) (except MLRA	
☐ Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	☐ Depleted Matrix (F3)	31-dissipan of hard-anhadia apposition and
☐ Thick Dark Surface (A12)	☐ Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and
☐ Sandy Mucky Mineral (S1)	☐ Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)	☐ Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):	•	
Туре:		
Depth (inches):		Hydric Soil Present? Yes 🗖 No 🗌
Remarks:		
HYDROLOGY		
HYDROLOGY Wetland Hydrology Indicators:		
Wetland Hydrology Indicators:	ired; check all that apply)	Secondary indicators (2 or more required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requ	ired; check all that apply) ☐ Water-Stained Leaves (B9) (except	
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1)	☐ Water-Stained Leaves (B9) (except	MLRA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requ Surface Water (A1) High Water Table (A2)		MLRA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requing Surface Water (A1) ☐ High Water Table (A2) ☐ Saturation (A3)		MLRA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requestions Surface Water (A1) ☐ High Water Table (A2) ☐ Saturation (A3) ☐ Water Marks (B1)	 Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) 	MLRA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (G2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requing Surface Water (A1) ☐ High Water Table (A2) ☐ Saturation (A3)	 Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) 	MLRA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (G2) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requestions Surface Water (A1) ☐ High Water Table (A2) ☐ Saturation (A3) ☐ Water Marks (B1)	 Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living 	MLRA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (G2) Saturation Visible on Aerial Imagery (C9) Roots (C3) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requications) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	□ Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living □ Presence of Reduced Iron (C4)	MLRA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	□ Water-Stained Leaves (B9) (except	MLRA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) (C6) FAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) Head High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	□ Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living □ Presence of Reduced Iron (C4)	MLRA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (G2) Saturation Visible on Aerial Imagery (C9) Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) (C6) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	□ Water-Stained Leaves (B9) (except	MLRA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) (C6) FAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery	□ Water-Stained Leaves (B9) (except	MLRA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (G2) Saturation Visible on Aerial Imagery (C9) Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) (C6) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
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Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present?	□ Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soils □ Stunted or Stressed Plants (D1) (LR (B7)) □ Other (Explain in Remarks) e (B8) No □ Depth (inches):	MLRA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) (C6) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
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WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: L. vashici	ヤント	_City/County: づた	Milling hours Sampling Date: S [4]
Applicant/Owner: Cool Runni	nge Cometruct	L10-1	State: Why Sampling Point: 100-0
Investigator(s):こ、ソグトットして		Section.	Township, Range: 16 /32 W Jo 3 F
Landform (hillslope, terrace, etc.):	se-	Local relief (conca	ve, convex, none): Concert Slope (%): 2
Subregion (LRR): _	Lat:		Long: Datum:
Soil Map Unit Name:			NWI classification: Datum:
Are climatic / hydrologic conditions on the s	te lynical for this time of ve	No Id No Id	NVVI classification: 1-26 W
Are Vegetation, Soil, or Hydrok			
Are Vegetation, Soll, or Hydrok			ormal Circumstances" present? Yes ☑ No ☐
		•	led, explain any answers in Remarks.)
SOMMAN OF FINDINGS - ARRA	an site map snowing	sampling point	locations, transects, important features, et
	′es⊠ No 🏻	Is the Sample	nd Aran
	′es1⊠ No□	within a Wet	
	'es 🗹 No 🛘		
Remarks:	welland		
/EGETATION – Use scientific na	nes of plants.		
Tree Stratum (Plot size:)	Absolute % Cover		Dominance Test worksheet:
1		Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant Species Across All Strata: (B)
4			Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)		= Total Cover	That Are OBL, FACW, or FAC: (A/B)
1			Prevalence Index worksheet:
2.			Total % Cover of: Multiply by:
3 I			OBL species x 1 =
j			FACW species x 2 = FAC species x 3 =
		= Total Cover	FACU species x 4 =
lerb Stratum (Plot size:)	<u>-</u>		UPL species x 5 =
· Sycerif el	<u> </u>		Column Totals: (A) (B)
. Randrenlus re Equisetum a	- 		
	5	Fac	Prevalence index = B/A =
			Hydrophytic Vegetation Indicators:
			Rapid Test for Hydrophytic Vegetation
			□ Dominance Test is >50% □ Prevalence Index is ≤3.0¹
`. <u>.</u>			l e e e e e e e e e e e e e e e e e e e
			Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
0	Y		☐ Wetland Non-Vascular Plants¹
l			☐ Problematic Hydrophytic Vegetation¹ (Explain)
loody Vine Stratum (Plot size:)		= Total Cover	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
· · · · · · · · · · · · · · · · · · ·			Hydrophytic
		= Total Cover	Vegetation Present? Yes ⊠ No □
Bare Ground in Herb Stratum			

Sampling Point: \S\rho\rho_-\gamma

Profile Description: (Describe to the de	epth needed to document t	ne maicator	or commi	the absence of indicators.)
Depth <u>Matrix</u>	Redox Feat	ur <u>es</u>		
(inches) Color (moist) %	Color (molst) %	Type'	_Loc ²	Texture Remarks
0-10/10/10/2				Siltloan
10-16 10/124/2	10-1/e 3/4 15	, C	w~	siltlaan
10-18 10 110 15	<u> </u>			
				
				
				2
¹ Type: C=Concentration, D=Depletion, R	M=Reduced Matrix, CS=Cov	ered or Coal	ed Sand Gr	rains. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :
Hydric Soil Indicators: (Applicable to	all LRRs, unless otherwise	noted.)		illulcators for t roblemano riyano asias
☐ Histosol (A1)	☐ Sandy Redox (S5)			2 cm Muck (A10)
☐ Histic Epipedon (A2)	☐ Stripped Matrix (S6)			☐ Red Parent Material (TF2) ☐ Very Shallow Dark Surface (TF12)
☐ Black Histic (A3)	Loamy Mucky Mineral		t MLRA 1)	☐ Other (Explain in Remarks)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix	(F2)		☐ Offiet (Exhiam in Pemarys)
Depleted Below Dark Surface (A11)	Depleted Matrix (F3)	F0)		³ Indicators of hydrophytic vegetation and
☐ Thick Dark Surface (A12)	Redox Dark Surface (wetland hydrology must be present,
Sandy Mucky Mineral (S1)	☐ Depleted Dark Surfac			unless disturbed or problematic.
☐ Sandy Gleyed Matrix (S4)	☐ Redox Depressions (i	-8)		dilless distributed of presistance
Restrictive Layer (if present):				
Type:				Hardwin Coll Dynnont? Voe W No C
Depth (inches):				Hydric Soil Present? Yes ☒ No ☐
Remarks:				
HYDROLOGY				
Wetland Hydrology Indicators:				
Wetland Hydrology Indicators:	ired; check all that apply)			Secondary Indicators (2 or more required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requ	ired; check all that apply) ☐ Water-Stained L	eaves (B9) (except ML1	RA Water-Stained Leaves (89) (MLRA 1, 2,
Wetland Hydrology Indicators: Primary Indicators (minimum of one requ ☐ Surface Water (A1)	ired; check all that apply) ☐ Water-Stained L 1, 2, 4A, and		except ML1	RA
Wetland Hydrology Indicators: Primary Indicators (minimum of one requ ☐ Surface Water (A1) ☐ High Water Table (A2)	☐ Water-Stained L	14B)	except MLI	RA
Wetland Hydrology Indicators: Primary Indicators (minimum of one requestions) Surface Water (A1) High Water Table (A2) Saturation (A3)	☐ Water-Stained L 1, 2, 4A, and ☐ Salt Crust (B11)	1 4B)	except MLI	RA
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Wetland Hydrology Indicators: Primary Indicators (minimum of one requestion Surface Water (A1) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	☐ Water-Stained L 1, 2, 4A, and ☐ Salt Crust (B11) ☐ Aquatīc Inverteb ☐ Hydrogen Sulfid	d 4B) trates (B13) e Odor (C1)		RA
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) Surface Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	☐ Water-Stained L 1, 2, 4A, and ☐ Salt Crust (B11) ☐ Aquatic Invertet ☐ Hydrogen Sulfid ☐ Oxidized Rhizos	14B) trates (B13) e Odor (C1) spheres along	g Living Roo	RA
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	☐ Water-Stained L 1, 2, 4A, and ☐ Salt Crust (B11) ☐ Aquatic Invertet ☐ Hydrogen Sulfid ☐ Oxidized Rhizos ☐ Presence of Re	il 4B) trates (B13) te Odor (C1) tripheres along duced Iron (C	g Living Roo (24)	RA
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Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Water Table Present? Yes Surface Saturation Present?	Water-Stained L 1, 2, 4A, and Salt Crust (B11) Aqualic Invertet: Hydrogen Sulfid Oxidized Rhizos Presence of Red Recent Iron Red Stunted or Street (B7) □ Other (Explain interest): Depth (inches): No □ Depth (inches): No □ Depth (inches):	orates (B13) e Odor (C1) epheres along duced Iron (C duction in Till assed Plants (in Remarks)	g Living Roo C4) ed Soils (CC D1) (LRR A	RA
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Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Water Table Present? Yes Surface Saturation Present?	Water-Stained L 1, 2, 4A, and Salt Crust (B11) Aqualic Invertet: Hydrogen Sulfid Oxidized Rhizos Presence of Red Recent Iron Red Stunted or Street (B7) □ Other (Explain interest): Depth (inches): No □ Depth (inches): No □ Depth (inches):	orates (B13) e Odor (C1) epheres along duced Iron (C duction in Till assed Plants (in Remarks)	g Living Roo C4) ed Soils (CC D1) (LRR A	RA
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	ION DATA FORM -	AAGSIGIII MO	antamoj rancyoj an	d Coast Region
Project/Site: Lindshier Au Applicant/Owner: Cool Runnings				
Applicant/Owner: Cool Runnings	· Constructio.	_	State: WA	Sampling Point: 1: 10 = 11
Investigator(s): E.Miller		Section	Township Range: 16 /	22 W 102 E
Landform (hillstope, terrace, etc.): dep.	l a	cal relief (canony	o company namely Co	
Subregion // RR):	l ob	cai reliei (concav	a' cousex' noue): Co (V)	Slope (%): O
Subregion (LRR):	เลเ.		Long:	Datum:
Soil Map Unit Name:			NWI classific	ation: <u> </u>
Are climatic / hydrologic conditions on the site typi			(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology			rmal Circumstances" prese	ent? Yes 🔼 No 🗆
Are Vegetation, Soli, or Hydrology	naturally problematic?	' (If neede	ed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS – Attach sit	e map showing sar	mpling point	locations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes ⊠	、No □			
•	No □	is the Sample		
	No □	within a Wetla	ınd? Yes 🔼 №	io 🗆
Remarks:				
Wt	Hand 1			
VEGETATION – Use scientific names	of plants.			
		minant Indicator	Dominance Test work	ehoot:
Tree Stratum (Plot size:)	% Cover Spe	ecies? Status	Number of Dominant Sp	ancine
1			That Are OBL, FACW, o	
2			Total Number of Domina	ant 😙
3			Species Across All Stra	
4			Percent of Dominant Sp	nodos
Sapling/Shrub Stratum (Plot size:)	= T	otal Cover	That Are OBL, FACW, o	or FAC: \ O O (A/B)
1. Lanicera in	37 1/	(SE () ()	Prevalence Index work	
" - DOTTION		7 100	- Frevalence maex work	(Sneet:
2. Acer Ci	25 V	A Carl		Adulta-tra barr
2. Acet ci	25 V	Hac	Total % Cover of:	Multiply by:
2. Acer ci 3			Total % Cover of: OBL species	x1=
2. Acer ci 3	····		Total % Cover of: OBL species FACW species	x1= x2=
2. Acer ci 3	British V-Tribab		Total % Cover of: OBL species FACW species FAC species	x1 = x2 = x3 =
2.	= T	otal Cover	Total % Cover of: OBL species FACW species FAC species FACU species	x1 = x2 = x3 = x4 =
2. Ace C C 3. 4. 5. Herb Stratum (Plot size:)	= T		Total % Cover of: OBL species FACW species FAC species FACU species UPL species	x1 = x2 = x3 = x4 = x5 =
2. Acer c: 3. 4. 5. Herb Stratum (Piot size:) 1. Phalwis ar 2. Moss	=T ≤ v 20	otal Cover	Total % Cover of: OBL species FACW species FAC species FACU species UPL species	x1 = x2 = x3 = x4 =
2. Acer c. 3. 4. 5. Herb Stratum (Plot size:) 1. Phalwis or 2	=T ≤ v 20	otal Cover	Total % Cover of: OBL species FACW species FAC species FACU species UPL species Column Totals: Prevalence index	x 1 =
2. Acer c. 3. 4. 5. Herb Stratum (Plot size:) 1. Phalm's ar 2. Moss 3. 4.	=T	Tal W	Total % Cover of: OBL species FACW species FAC species FACU species UPL species Column Totals: Prevalence index Hydrophytic Vegetatio	x 1 =
2. Acer c. 3. 4. 5. Herb Stratum (Piot size:) 1. Phalan's ar 2. moss 3. 4. 5.	=T	otal Cover	Total % Cover of: OBL species FACW species FAC species FACU species UPL species Column Totals: Prevalence index Hydrophytic Vegetatio	x 1 =
2. Acer c. 3. 4. 5. Herb Stratum (Piot size:) 1. Phalan's ar 2. moss 3. 4. 5. 6.	= T	otal Cover	Total % Cover of: OBL species FACW species FAC species FACU species UPL species Column Totals: Prevalence Index Hydrophytic Vegetatio Rapid Test for Hydro	x 1 =
2. Acer C 3. 4. 5. Herb Stratum (Plot size:) 1. Phalmis ar 2. moss 3. 4. 5. 6. 7.	=T	otal Cover	Total % Cover of: OBL species FACW species FAC species FACU species UPL species Column Totals: Prevalence Index Hydrophytic Vegetatio Rapid Test for Hydro	x 1 =
2. Acer c. 3. 4. 5. Herb Stratum (Plot size:) 1. Phalaris ar 2. moss 3. 4. 5. 6. 7.	=T	otal Cover	Total % Cover of: OBL species FACW species FAC species FACU species UPL species Column Totals: Prevalence Index Hydrophytic Vegetatio. Rapid Test for Hydro Dominance Test Is > Prevalence Index is Morphological Adapt	x 1 =
2. Ace C. 3. 4. 5. Herb Stratum (Plot size:) 1. Phalais at 2. Moss 3. 4. 5. 6. 7. 8.	=T	otal Cover	Total % Cover of: OBL species FACW species FAC species FACU species UPL species Column Totals: Prevalence Index Hydrophytic Vegetatio Rapid Test for Hydro Dominance Test Is > Prevalence Index is Morphological Adapt data in Remarks	x 1 =
2. Acer c. 3. 4. 5. Herb Stratum (Plot size:) 1. Phalaris ar 2. Moss 3. 4. 5. 6. 7. 8. 9.	=T	otal Cover	Total % Cover of: OBL species FACW species FAC species FACU species UPL species Column Totals: Prevalence Index Hydrophytic Vegetatio Rapid Test for Hydro Dominance Test Is > Prevalence Index is Morphological Adapt data in Remarks Wetland Non-Vascul	x 1 =
2. Acer C: 3. 4. 5. Herb Stratum (Piot size:) 1. Phalaris ar 2. Moss 3. 4. 5. 6. 7. 8. 9.	= T	otal Cover	Total % Cover of: OBL species FACW species FAC species FACU species UPL species Column Totals: Prevalence Index Hydrophytic Vegetatio Rapid Test for Hydro Dominance Test Is > Prevalence Index is Morphological Adapt data in Remarks Wetland Non-Vascul Problematic Hydroph	x 1 = x 2 = x 3 = x 4 = x 5 = (A) (B) = B/A = In Indicators: ophytic Vegetation 50% ≤3.0¹ attions¹ (Provide supporting or on a separate sheet) ar Plants¹ oytic Vegetation¹ (Explain)
2. Ace C. 3. 4. 5. Herb Stratum (Plot size:) 1. Phalais ar 2. Moss 3. 4. 5. 6. 7. 8. 9. 10.	= T	otal Cover	Total % Cover of: OBL species FACW species FAC species FACU species UPL species Column Totals: Prevalence Index Hydrophytic Vegetatio Rapid Test for Hydro Dominance Test Is > Prevalence Index is Morphological Adapt data in Remarks Wetland Non-Vascul Problematic Hydroph	x 1 =
2. Acer C: 3. 4. 5. Herb Stratum (Piot size:) 1. Phalaris ar 2. Moss 3. 4. 5. 6. 7. 8. 9. 10. 11. Woody Vine Stratum (Plot size:)	= T	otal Cover	Total % Cover of: OBL species FACW species FAC species FACU species UPL species Column Totals: Prevalence Index Hydrophytic Vegetatio Rapid Test for Hydro Dominance Test Is > Prevalence Index is Morphological Adapt data in Remarks Wetland Non-Vascul Problematic Hydropt Indicators of hydric soil	x 1 =
2. Acer ci 3. 4	= T	otal Cover	Total % Cover of: OBL species FACW species FAC species FACU species UPL species Column Totals: Prevalence Index Hydrophytic Vegetatio Rapid Test for Hydro Dominance Test Is > Prevalence Index is Morphological Adapt data in Remarks Wetland Non-Vascul Problematic Hydroph Indicators of hydric soil be present, unless distur	x 1 =
2. Acer c: 3. 4. 5. Herb Stratum (Plot size:) 1. Phalaris ar 2. Moss 3. 4. 5. 6. 7. 8. 9. 10. 11. Woody Vine Stratum (Plot size:) 1.	= T	otal Cover Fac W otal Cover	Total % Cover of: OBL species FACW species FAC species FACU species UPL species Column Totals: Prevalence Index Hydrophytic Vegetatio Rapid Test for Hydro Dominance Test is > Prevalence Index is Morphological Adapt data in Remarks Wetland Non-Vascul Problematic Hydroph Indicators of hydric soil be present, unless distur	x 1 =

					OI COMMIN	n the absence of Indicators.)
Depth Ma	atrix	Red	ox Featur	es To all	12	Texture Remarks
(inches) Color (molst)	%	Color (moist)		1 ype_	_LOC	
0-6 WYRE						1000
6-12 104R21	2.	10-12416	ξ0		<u>~~</u>	sill locu
					·	
						and the second s
¹ Type: C=Concentration, E	Deposition DA	4-Doduced Matrix C	S-Cover	ed or Coal	ed Sand G	arains. ² Location: PL=Pore Lining, M=Matrix.
Hydric Soll Indicators: (A	D=Depletion, KA Annlicable to a	N-Reduced Matrix, C	erwise no	ted.)	co oano o	Indicators for Problematic Hydric Solis ³ :
☐ Histosof (A1)	applicable to a	☐ Sandy Redox				2 cm Muck (A10)
☐ Histic Epipedon (A2)		Stripped Matrix				☐ Red Parent Material (TF2)
☐ Black Histic (A3)		Loamy Mucky		-1) (excep	(MLRA 1	☐ Very Shallow Dark Surface (TF12)
☐ Hydrogen Sulfide (A4)		☐ Loamy Gleyed				☐ Other (Explain in Remarks)
☐ Depleted Below Dark S	Surface (A11)	Depleted Matri	ix (F3)			•
☐ Thick Dark Surface (A1		Redox Dark St				3Indicators of hydrophytic vegetation and
☐ Sandy Mucky Mineral (Depleted Dark				welland hydrology must be present,
☐ Sandy Gleyed Matrix (☐ Redox Depres	sions (F8)		unless disturbed or problematic.
Restrictive Layer (if pres						
Type:						
Depth (inches):		···				Hydric Soll Present? Yes ☑ No □
Remarks:						
HYDROLOGY			<u> </u>	<u> </u>		
HYDROLOGY Wetland Hydrology Indic	ators:					
		ed; check all that ap	ply)			Secondary Indicators (2 or more required)
Wetland Hydrology Indic		red; check all that ap		ves (B9) (c	except ML	
Wetland Hydrology Indic Primary Indicators (minimu Surface Water (A1)	um of one requir	☐ Water-St			except ML	RA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hydrology Indic Primary Indicators (minimu ☐ Surface Water (A1) ☐ High Water Table (A2)	um of one requir	☐ Water-St	ained Lea 4A, and 4		except ML	RA
Wetland Hydrology Indic Primary Indicators (minimu Surface Water (A1)	um of one requir	☐ Water-St 1, 2, 4 ☐ Salt Crus ☐ Aquatic I	ained Lea 4A, and 4 st (B11) nvertebra	B) tes (B13)	except ML	RA
Wetland Hydrology Indic Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3)	um of one requir	☐ Water-St 1, 2, 4 ☐ Salt Crus	ained Lea 4A, and 4 st (B11) nvertebra	B) tes (B13)	except ML	RA
Wetland Hydrology Indic Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	um of one requir	☐ Water-St 1, 2, ☐ Salt Crus ☐ Aquatic I ☐ Hydrogei ☐ Oxidized	ained Lea 4A, and 4 st (B11) nvertebra n Sulfide (Rhizosph	B) tes (B13) Odor (C1) teres atong	Living Ro	RA ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ☐ Drainage Patterns (B10) ☐ Dry-Season Water Table (C2) ☐ Saturation Visible on Aerial Imagery (C9) oots (C3) ☐ Geomorphic Position (D2)
Wetland Hydrology Indic Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3)	um of one requir	☐ Water-St 1, 2, 4 ☐ Salt Crus ☐ Aquatic 1 ☐ Hydroget ☐ Oxidized ☐ Presence	ained Lea 4A, and 4 st (B11) nvertebra n Sulfide (Rhizosph e of Reduc	tes (B13) Odor (C1) teres along ced fron (C	Living Ro	RA ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ☐ Drainage Patterns (B10) ☐ Dry-Season Water Table (C2) ☐ Saturation Visible on Aerial Imagery (C9) oots (C3) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3)
Wetland Hydrology Indic Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	um of one requir	☐ Water-St 1, 2, ☐ Salt Crus ☐ Aquatic 1 ☐ Hydrogel ☐ Oxidized ☐ Presence	ained Lea 4A, and 4 st (B11) nvertebra n Sulfide (Rhizosph e of Reducton Reducton	tes (B13) Odor (C1) teres along ced Iron (C	Living Ro 4) ed Solls (C	RA
Wetland Hydrology Indic Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	um of one requir	☐ Water-St 1, 2, 4 ☐ Salt Crus ☐ Aquatic 1 ☐ Hydrogei ☐ Oxidized ☐ Presence ☐ Recent Ii	ained Lea 4A, and 4 st (B11) nvertebra n Sulfide (Rhizosph e of Reduction Reduction Reduction	tes (B13) Odor (C1) teres along ced Iron (C blion in Tille d Plants (E	Living Ro 4) ed Solls (C	RA
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Wetland Hydrology Indic Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B1) Inundation Visible on A1 Sparsely Vegetated C6 Fleid Observations: Surface Water Present? Water Table Present?	2) 36) Aerial Imagery (loncave Surface Yes	Water-St 1, 2, 4 Salt Crus Aquatic 1 Hydroger Coxidized Presence Recent in Stunted of Stunted of (B8) No Depth (inch	ained Lead 4A, and 4 st (B11) nvertebra n Sulfide (Rhizosph e of Reduction Reduc	tes (B13) Ddor (C1) teres along ced Iron (C tion in Tille d Plants (I Remarks)	Living Ro 4) ed Solls (C 01) (LRR A	RA
Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B1) Inundation Visible on A1 Sparsely Vegetated Coffield Observations: Surface Water Present? Water Table Present?	2) 36) Aerial Imagery (loncave Surface Yes	Water-St 1, 2, 4 Salt Crus Aquatic 1 Hydroger Coxidized Presence Recent in Stunted of Stunted of (B8) No Depth (inch	ained Lead 4A, and 4 st (B11) nvertebra n Sulfide (Rhizosph e of Reduction Reduc	tes (B13) Ddor (C1) teres along ced Iron (C tion in Tille d Plants (I Remarks)	Living Ro 4) ed Solls (C 01) (LRR A	RA
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WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

~ 1 \	Park Contract	, - i	_City/Co	ounty: バンワ	110 micho	Λ.σ.e.	Sampling Date:	5/-11
Project/Sile: Lindshier Applicant/Owner: Cool Runn	inge Com	<u>.e.drucd</u>	110-		State:	WW	Sampling Point	1-90-1
vestigator(s):こいべいりとく				Section	Township Rang	10.16/2	20102	₹=;
indform (hillslope, terrace, etc.):	Sloce		Local	relief (conca	ve, convex, non	e}: ∨\n	J Sic	ne (%):
iorogion (cray).		tat:			Long:		Datu	m:
if Map Unit Name:					N	WI classificat	ion: up	\
e climatic / hydrologic conditions on the	site typical for thi	s time of ye	ar? Yes	3 🔼 No 🗆	(If no, explain in	n Remarks.)	`	
Vegetation, Soil, or Hydr	ology signif	icantly dist	urbed?	Are "N	ormal Circumsta	nces" presen	t? Yes ⊠ No	ιП
Vegetation, Soll, or Hydra	ology natura	ally problem	natic?		ed, explain any		,	_
JMMARY OF FINDINGS - Att	ach site map	showing	samp					atures, etc
ydrophytic Vegetation Present?	Yes □ No 🏋						·	
ydric Soil Present?	Yes □ No 🗷			s the Sample			<i>ا</i> ــد	
etland Hydrology Present?	Yes 🗌 No 🗷		W	itnin a Weti	and?	Yes ☐ No	X	
emarks:	npla	7)	7-2	the	Vison	20 ~	welle	med T
GETATION – Use scientific n	ames of plant	 ks.		··			<u>.,,</u>	
ae Stratum (Plot size:)		Absolute		ant Indicator	Dominance	Test worksh	eet:	
		% Cover	Specie	s? Status	Number of D	ominant Spe	cies 🧳	
		50		- + ~C	That Are OB	L, FACW, or i	FAC: 2	(A)
		_\ D		Fac	Total Numbe	r of Dominan	t /	
				-	Species Acro	ss All Strata:	<u>_</u>	(B)
oling/Shrub Stratum (Plot size:	1		= Total	Cover	Percent of De That Are OB	ominant Spec L, FACW, or f	ies FAC: _ ~ (C) _(A/B)
5-1, mphanicupo		30	/	Fach	Prevalence I	nelan maeleal		
Acer ci		80	V	Fac		Cover of:		h
Francyle pu		10		Fac	1		<u>Multiply</u> x1=	
		20	V	Facul			x1 x2=	
				- 			x3=	
			= Total	Cover			x4=	
b Stratum (Plot size:)			/				_ x5=	
Carey de		20		Fac			_	
1 2 1 COURT N	MAX	20	<u> </u>	+ac4				
					Prevale	nce Index = f	3/A =	
					Hydrophytic			
							ytic Vegetation	
		 -			Dominano		*-	
					☐ Prevalenc		•	-
		 -			☐ Morpholog	iical Adaptatio Remarks or	ons¹ (Provide su on a separate si	pporting
					☐ Wetland N			
	**********						c Vegetation¹ (E	xolain)
					1Indicators of I	nydric soil and	i wetland hydrol	onv must
dy Vine Stratum (Plot size:)				• -	be present, un	less disturbe	d or problematic	- 37
					16 1			
•					Hydrophytic Vegetation			
							1	
are Ground in Herb Stratum		:	= Total C	Cover	Present?	Yes ∐	No)⊠(

Links Describitory (Describe to me maken was	to document the indicator or confirm the absence of indicators.)
D et. Motrix	Redox Features
(inches) Color (moist) % Color (moi	st) % Type¹ Loc² Texture Remarks
0-10 10-1R3/3	loam
10-16 2.57341	loam
10 22 1	
	the same of the sa
	Matrix CS=Covered or Coaled Sand Grains. ² Location: PL=Pore Lining, M=Matrix.
¹ Type: C=Concentration, D=Depletion, RM=Reduced	maain, oo ooroise er eester r
Hydric Soil Indicators: (Applicable to all LRRs, unl	F3 0 Mark (A40)
1 - 1100-1101	TOUR (SO)
- I more Thibement (m)	ed Matrix (S6) Mucky Mineral (F1) (except MLRA 1) Wery Shallow Dark Surface (TF12)
	/ Gleyed Matrix (F2) Other (Explain in Remarks)
[— (·) ·· · · · · · · · · · · · · · · · ·	ed Matrix (F3)
	Dark Surface (F6) Indicators of hydrophytic vegetation and
I I THOK BOTH CONTACT PRINT	led Dark Surface (F7) welland hydrology must be present,
	Depressions (F8) unless disturbed or problematic.
Restrictive Layer (if present):	
Туре:	
Depth (inches):	Hydric Soil Present? Yes □ No 🖳
Remarks:	
Kelliaiks.	
-	
HYDROLOGY	
HYDROLOGY Wetland Hydrology Indicators:	
Wetland Hydrology Indicators:	l that apply) Secondary Indicators (2 or more required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check al	Water-Stained Leaves (B9) (except MLRA
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check al ☐ Surface Water (A1)	Water-Stained Leaves (B9) (except MLRA
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check al ☐ Surface Water (A1) ☐ High Water Table (A2)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check al ☐ Surface Water (A1) ☐ V ☐ High Water Table (A2) ☐ Saturation (A3) ☐ S	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Advantic Invertebrates (B13) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
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Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all Surface Water (A1) Water Table (A2) Saturation (A3) Saturation (B2) Saturation (B2) Saturation (B4) Saturation (B4) Surface Soil Cracks (B4) Surface Soil Cracks (B6) Saturation (B5) Surface (B6) Saturation (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Adjustic Invertebrates (B13) Adjustic Invertebrates (B10) Adjusti
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Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check al 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) Field Observations: Surface Water Present? Yes No Degraturation Present? Yes No Degraturat	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) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks) Wetland Hydrology Present? Yes \(\) No \(\)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check al 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) Field Observations: Surface Water Present? Yes No Degraturation Present? Yes No Degraturat	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) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks) Wetland Hydrology Present? Yes \(\) No \(\)

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region Project/Site: Lindshier Ave City/County: Bellinghon Sampling Date: 5/4/22 Applicant/Owner: Cool Bunnings Construction State: WM Sampling Point: NP-12 Investigator(s): E.M:1/ec Section, Township, Range: 16 /32 W / 02 E Landform (hillstope, terrace, etc.): 5/000 Local reflet (concave, convex, none): 40×4 Slope (%): 2-4 Soil Map Unit Name: ____ NWI classification: PSS 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 _____, Soli _____, 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 Hydric Soil Present? Yes ☑ No □ within a Wetland? Yes 🛛 No 🗌 Wetland Hydrology Present? Yes 【 No □ Remarks: VEGETATION – Use scientific names of plants. Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size:) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: (B) Percent of Dominant Species = Total Cover That Are OBL, FACW, or FAC: Sapling/Shrub Stratum (Plot size: ____) 1. COMMUS SP 100 Fac W Prevalence Index worksheet: 2. Lonicera in 30 / Total % Cover of: Multiply by: FACIN 3. Rosa Nu (0) Fac. OBL species _____ x 1 = ____ FACW species _____ x 2 = ____ FAC species _____ x 3 = ____ FACU species _____ x 4 = ____ _____ = Total Cover Herb Stratum (Plot size:) UPL species _____ x 5 = ____ 1. WOSS Column Totals: _____ (A) ____ (B) 3. Athyrium le 10 fai Prevalence Index = B/A = **Hydrophytic Vegetation Indicators:** ☐ Rapid Test for Hydrophytic Vegetation ☑ Dominance Test is >50% Prevalence Index is ≤3.0¹ ☐ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) □ Wetland Non-Vascular Plants¹ 10. ☐ Problematic Hydrophytic Vegetation¹ (Explain) 1 Indicators of hydric soil and wetland hydrology must

____ = Total Cover

_____ = Total Cover

Remarks:

Woody Vine Stratum (Plot size:)

% Bare Ground in Herb Stratum

Yes ⊠ No □

be present, unless disturbed or problematic.

Hydrophytic Vegetation

Present?

Sampling Point: $\sqrt{Q} - 12$

Profile Description: (Describe to the	he depth needed to document the indicator or co	Williff (tie apsetice of titeragrapes)
Depth Matrix	Redox Features	· ·
(inches) Color (moist) 9	6 Color (moist) % Type1 Loc	11 ,
0-10 2,543/1	10-10=3/4 S C m	
10-16 10483/2.	10-18 3/4 15 C W	sill low
	,	
20 12 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
	DAL Dadwood Motive CS-Covered or Coaled Sar	nd Grains. ² Location: PL=Pore Lining, M=Matrix.
Type: C=Concentration, D=Depletic	on, RM=Reduced Matrix, CS=Covered or Coated Sar a to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
	Sandy Redox (S5)	2 cm Muck (A10)
☐ Histosol (A1) ☐ Histic Epipedon (A2)	Stripped Matrix (S6)	☐ Red Parent Material (TF2)
Black Histic (A3)	☐ Loamy Mucky Mineral (F1) (except MLR	A 1)
Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)	☐ Other (Explain in Remarks)
☐ Depleted Below Dark Surface (A	11) Depleted Matrix (F3)	3. H. Janes Charles to the constation and
☐ Thick Dark Surface (A12)	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present,
☐ Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	unless disturbed or problematic.
☐ Sandy Gleyed Matrix (S4)	☐ Redox Depressions (F8)	uniess distanced of prosicinosis.
Restrictive Layer (if present):		
Type:	· <u>·</u>	Hydric Soil Present? Yes ☑ No ☐
Depth (inches):		Tryuno don't resent 1 too per 110
Remarks:		
1		
HADEOLOGA		
HYDROLOGY Wetland Hydrology Indicators:		
Wetland Hydrology Indicators:	required; check all that apply)	Secondary Indicators (2 or more required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one	required; check all that apply) Water-Stained Leaves (B9) (excep	
Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1)	☐ Water-Stained Leaves (B9) (exception)	
Wetland Hydrology Indicators: Primary Indicators (minimum of one ☐ Surface Water (A1) ☐ High Water Table (A2)	☐ Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B)	t MLRA
Wetland Hydrology Indicators: Primary Indicators (minimum of one □ Surface Water (A1) ☑ High Water Table (A2) ☑ Saturation (A3)	□ Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B)□ Salt Crust (B11)	t MLRA
Wetland Hydrology Indicators: Primary Indicators (minimum of one □ Surface Water (A1) ☑ High Water Table (A2) ☑ Saturation (A3) □ Water Marks (B1)	 □ Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) 	t MLRA
Wetland Hydrology Indicators: Primary Indicators (minimum of one □ Surface Water (A1) ☑ High Water Table (A2) ☑ Saturation (A3) □ Water Marks (B1) □ Sediment Deposits (B2)	 □ Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) 	t MLRA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators: Primary Indicators (minimum of one □ Surface Water (A1) ☑ High Water Table (A2) ☑ Saturation (A3) □ Water Marks (B1) □ Sediment Deposits (B2) □ Drift Deposits (B3)	 □ Water-Stained Leaves (B9) (excepted 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living 	t MLRA
Wetland Hydrology Indicators: Primary Indicators (minimum of one □ Surface Water (A1) ☑ High Water Table (A2) ☑ Saturation (A3) □ Water Marks (B1) □ Sediment Deposits (B2) □ Drift Deposits (B3) □ Algal Mat or Crust (B4)	 □ Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) 	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) Is (C6) FAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one □ Surface Water (A1) ☑ High Water Table (A2) ☑ Saturation (A3) □ Water Marks (B1) □ Sediment Deposits (B2) □ Drift Deposits (B3) □ Algal Mat or Crust (B4) □ Iron Deposits (B5)	□ Water-Stained Leaves (B9) (excep 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aqualic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living Presence of Reduced Iron (C4)	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) Is (C6) RAA) Reised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one □ Surface Water (A1) ☑ High Water Table (A2) ☑ Saturation (A3) □ Water Marks (B1) □ Sediment Deposits (B2) □ Drift Deposits (B3) □ Algal Mat or Crust (B4) □ Iron Deposits (B5) □ Surface Soil Cracks (B6)	Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soll Stunted or Stressed Plants (D1) (Li	MLRA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) (C6) FAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one □ Surface Water (A1) ☑ High Water Table (A2) ☑ Saturation (A3) □ Water Marks (B1) □ Sediment Deposits (B2) □ Drift Deposits (B3) □ Algal Mat or Crust (B4) □ Iron Deposits (B5) □ Surface Soil Cracks (B6) □ Inundation Visible on Aerial Ima	Water-Stained Leaves (B9) (excep 1, 2, 4A, and 4B) Salt Crust (B11) Aqualic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Solicity Stunted or Stressed Plants (D1) (Liggery (B7))	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) Is (C6) RAA) Reised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one □ Surface Water (A1) ☑ High Water Table (A2) ☑ Saturation (A3) □ Water Marks (B1) □ Sediment Deposits (B2) □ Drift Deposits (B3) □ Algal Mat or Crust (B4) □ Iron Deposits (B5) □ Surface Soil Cracks (B6) □ Inundation Visible on Aerial Ima	Water-Stained Leaves (B9) (excep 1, 2, 4A, and 4B) Salt Crust (B11) Aqualic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Solicity Stunted or Stressed Plants (D1) (Liggery (B7))	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) Is (C6) RAA) Reised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one □ Surface Water (A1) ☑ High Water Table (A2) ☑ Saturation (A3) □ Water Marks (B1) □ Sediment Deposits (B2) □ Drift Deposits (B3) □ Algal Mat or Crust (B4) □ Iron Deposits (B5) □ Surface Soil Cracks (B6) □ Inundation Visible on Aerial Ima □ Sparsely Vegetated Concave St	□ Water-Stained Leaves (B9) (excep 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Sol In Stunted or Stressed Plants (D1) (Liugery (B7) □ Other (Explain in Remarks)	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) Is (C6) RAA) Reised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Ima Sparsely Vegetated Concave Strield Observations: Surface Water Present?	□ Water-Stained Leaves (B9) (excep 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Sol Stunted or Stressed Plants (D1) (Ligery (B7) □ Other (Explain in Remarks) □ No □ Depth (inches): □ Other (Explain in Remarks)	MLRA 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) □ (C6) □ FAC-Neutral Test (D5) □ RR A) □ Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Ima Sparsely Vegetated Concave Strield Observations: Surface Water Present? Yes Water Table Present?	Water-Stained Leaves (B9) (excep 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sol Stunted or Stressed Plants (D1) (Ligery (B7) Other (Explain in Remarks) Pepth (inches): Depth (inches):	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) Is (C6) RAA) Reised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Ima Sparsely Vegetated Concave State of Concave State o	Water-Stained Leaves (B9) (excep 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soli Stunted or Stressed Plants (D1) (Li gery (B7) Other (Explain in Remarks) urface (B8) No Depth (inches): No Depth (inches):	MLRA Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Ima Sparsely Vegetated Concave State of Concave State o	Water-Stained Leaves (B9) (excep 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sol Stunted or Stressed Plants (D1) (Ligery (B7) Other (Explain in Remarks) Pepth (inches): Depth (inches):	MLRA Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Ima Sparsely Vegetated Concave St Field Observations: Surface Water Present? Water Table Present? Yes Saturation Present? Yes	Water-Stained Leaves (B9) (excep 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soli Stunted or Stressed Plants (D1) (Li gery (B7) Other (Explain in Remarks) urface (B8) No Depth (inches): No Depth (inches):	MLRA Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Ima Sparsely Vegetated Concave St Field Observations: Surface Water Present? Water Table Present? Yes Saturation Present? Yes	Water-Stained Leaves (B9) (excep 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soli Stunted or Stressed Plants (D1) (Li gery (B7) Other (Explain in Remarks) urface (B8) No Depth (inches): No Depth (inches):	MLRA Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Ima Sparsely Vegetated Concave St Field Observations: Surface Water Present? Water Table Present? Yes Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream ga	Water-Stained Leaves (B9) (excep 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soli Stunted or Stressed Plants (D1) (Li gery (B7) Other (Explain in Remarks) urface (B8) No Depth (inches): No Depth (inches):	MLRA Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Ima Sparsely Vegetated Concave Strietd Observations: Surface Water Present? Water Table Present? Yes Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream gates)	Water-Stained Leaves (B9) (excep 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soli Stunted or Stressed Plants (D1) (Li gery (B7) Other (Explain in Remarks) urface (B8) No Depth (inches): No Depth (inches):	MLRA

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region Project/Site: Lindshier Ave City/County: Bellinghous Sampling Date: 5/4/22

Applicant/Owner: Cool Eunnings Construction State: WW Sampling Point: 0P-14 Investigator(s): E.Miller Section, Township, Range: 16 /32 W/02 F Landform (hillstope, terrace, etc.): Local relief (concave, convex, none): Concave. Stope (%): O Subregion (LRR): Long: Datum: Soil Map Unit Name: ___ NWI classification: PSS 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 D. 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 Hydric Soil Present? Yes'⊠, No 🔲 within a Wetland? Yes 🛛 No 🗌 Wetland Hydrology Present? Yes ☑ No 🗆 Remarks: \sim mosaic VEGETATION - Use scientific names of plants. Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size:) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: (B) Percent of Dominant Species = Total Cover That Are OBL, FACW, or FAC: Sapling/Shrub Stratum (Plot size: 1. Louicera in 20 / Face Prevalence Index worksheet: 40_ Total % Cover of: Multiply by: Acer ci OBL species _____ x 1 = ____ FACW species _____ x 2 = ____ FAC species _____ x 3 = ____ = Total Cover FACU species _____ x 4 = ____ Herb Stratum (Plot size: UPL species _____ x 5 = ____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: ☐ Rapid Test for Hydrophytic Vegetation ☑ Dominance Test is >50% □ Prevalence Index is ≤3.0¹ ☐ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Wetland Non-Vascular Plants¹ 10. ☐ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must = Total Cover be present, unless disturbed or problematic. Woody Vine Stratum (Plot size:) Hydrophytic Vegetation _____ = Total Cover Yes ☑ No 🗆 Present? % Bare Ground in Herb Stratum ____ Remarks:

Sampling Point: 4

Profile Description: (Describe to the d	epth needed to document the indicator or co	With the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (molst) %	Color (moist) % Type ¹ Loc	. 1 1
0-8 10-1R3/2	10/123/3 3 C W	~ s.14 loan
8-16 2.575/2	107R4/6 20 c m	Sandy locus
5-10 2121	10 10 - 10 - 10 - 10 - 10 - 10 - 10 - 1	
	-	
		2
¹ Type: C=Concentration, D=Depletion, R	M=Reduced Matrix, CS=Covered or Coated Sa	nd Grains. 2 Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :
Hydric Soil Indicators: (Applicable to	all LRRs, unless otherwise noted.)	indicators for Problematic Hydric Sons .
☐ Histosol (A1)	☐ Sandy Redox (S5)	2 cm Muck (A10)
☐ Histic Epipedon (A2)	Stripped Matrix (S6)	Red Parent Material (TF2)
☐ Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLF	(A 1) ☐ Very Shallow Dark Surface (TF12) ☐ Other (Explain in Remarks)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)	T1 Office (Exhibit at (Jemarys)
Depleted Below Dark Surface (A11)	Depleted Matrix (F3) Redox Dark Surface (F6)	3Indicators of hydrophytic vegetation and
☐ Thick Dark Surface (A12)		wetland hydrology must be present,
Sandy Mucky Mineral (S1)	☐ Depleted Dark Surface (F7) ☐ Redox Depressions (F8)	unless disturbed or problematic.
Sandy Gleyed Matrix (S4) Restrictive Layer (if present):	2 Tredox populations (1 4)	
Type:		
Depth (inches):		Hydric Soll Present? Yes ☒ No ☐
Remarks:		
1		
1		
HADBO! OGA		
HYDROLOGY		
Wetland Hydrology Indicators:	eleads check all that anniv?	Secondary Indicators (2 or more required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requ		Secondary Indicators (2 or more required) of MI RA
Wetland Hydrology Indicators: Primary Indicators (minimum of one requi	☐ Water-Stained Leaves (B9) (excep	Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators: Primary Indicators (minimum of one requestion Surface Water (A1) High Water Table (A2)		of MLRA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requications) Surface Water (A1) High Water Table (A2) Saturation (A3)	☐ Water-Stained Leaves (B9) (excep1, 2, 4A, and 4B)☐ Salt Crust (B11)	of MLRA
Wetland Hydrology Indicators: Primary Indicators (minimum of one requications) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	 □ Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) 	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requication (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	 □ Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) 	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requication (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	 □ Water-Stained Leaves (B9) (except, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Livin 	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) GRoots (C3)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requications) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	☐ Water-Stained Leaves (B9) (excep 1, 2, 4A, and 4B) ☐ Salt Crust (B11) ☐ Aquatic Invertebrates (B13) ☐ Hydrogen Sulfide Odor (C1) ☐ Oxidized Rhizospheres along Livin ☐ Presence of Reduced Iron (C4)	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)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requication (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	☐ Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) ☐ Salt Crust (B11) ☐ Aquatic Invertebrates (B13) ☐ Hydrogen Sulfide Odor (C1) ☐ Oxidized Rhizospheres along Livin☐ Presence of Reduced Iron (C4) ☐ Recent Iron Reduction in Tilled Soi	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) ils (C6) □ FAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requication of some requirement of some	☐ Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) ☐ Salt Crust (B11) ☐ Aquatic Invertebrates (B13) ☐ Hydrogen Sulfide Odor (C1) ☐ Oxidized Rhizospheres along Livin☐ Presence of Reduced Iron (C4) ☐ Recent Iron Reduction in Tilled Soi☐ Stunted or Stressed Plants (D1) (L	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) □ Shallow Aquitard (D5) RR A) □ Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requication of section	□ Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soi Stunted or Stressed Plants (D1) (L	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) ils (C6) □ FAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requication of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface	□ Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soi Stunted or Stressed Plants (D1) (L	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) □ Shallow Aquitard (D5) RR A) □ Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requication of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations:	☐ Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) ☐ Salt Crust (B11) ☐ Aquatic Invertebrates (B13) ☐ Hydrogen Sulfide Odor (C1) ☐ Oxidized Rhizospheres along Livin☐ Presence of Reduced Iron (C4) ☐ Recent Iron Reduction in Tilled Soi☐ Stunted or Stressed Plants (D1) (L(B7) ☐ Other (Explain in Remarks) ee (B8)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) □ Shallow Aquitard (D5) RR A) □ Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requication of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Yes	☐ Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) ☐ Salt Crust (B11) ☐ Aquatic Invertebrates (B13) ☐ Hydrogen Sulfide Odor (C1) ☐ Oxidized Rhizospheres along Livin☐ Presence of Reduced Iron (C4) ☐ Recent Iron Reduction in Tilled Soi☐ Stunted or Stressed Plants (D1) (L(B7)☐ Other (Explain in Remarks) e (B8) No ☑ Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) □ Shallow Aquitard (D5) RR A) □ Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requications) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Water Table Present?	□ Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Livin □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soi □ Stunted or Stressed Plants (D1) (L(B7) □ Other (Explain in Remarks) □ Bepth (inches): □ Depth (inches)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requications) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Water Table Present? Yes Saturation Present?	Water-Stained Leaves (B9) (except, 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Livin □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soi □ Stunted or Stressed Plants (D1) (L (B7) □ Other (Explain in Remarks) e (B8) No ☑ Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) □ Shallow Aquitard (D5) RR A) □ Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requication of some requirements of	Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Livin □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soi □ Stunted or Stressed Plants (D1) (L (B7) □ Other (Explain in Remarks) • (B8) No □ Depth (inches): □ □ Depth (inches): □ □ Depth (inches): □ □ Depth (inches): □	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) RR A) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7) Wetland Hydrology Present? Yes 🛣 No □
Wetland Hydrology Indicators: Primary Indicators (minimum of one requication of some requirements of	□ Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Livin □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soi □ Stunted or Stressed Plants (D1) (L(B7) □ Other (Explain in Remarks) □ Bepth (inches): □ Depth (inches)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) RR A) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7) Wetland Hydrology Present? Yes 🛣 No □
Wetland Hydrology Indicators: Primary Indicators (minimum of one requication of some requication) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Water Table Present? Yes Saturation Present? Yes Saturation Present? Yes Saturation Present? Yes Describe Recorded Data (stream gauge)	Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Livin □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soi □ Stunted or Stressed Plants (D1) (L (B7) □ Other (Explain in Remarks) • (B8) No □ Depth (inches): □ □ Depth (inches): □ □ Depth (inches): □ □ Depth (inches): □	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) RR A) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7) Wetland Hydrology Present? Yes 🛣 No □
Wetland Hydrology Indicators: Primary Indicators (minimum of one requication of some requirements of	Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Livin □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soi □ Stunted or Stressed Plants (D1) (L (B7) □ Other (Explain in Remarks) • (B8) No □ Depth (inches): □ □ Depth (inches): □ □ Depth (inches): □ □ Depth (inches): □	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) RR A) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7) Wetland Hydrology Present? Yes 💢 No □
Wetland Hydrology Indicators: Primary Indicators (minimum of one requication of some requication) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Water Table Present? Yes Saturation Present? Yes Saturation Present? Yes Market Market Present (Stream gauge) Describe Recorded Data (stream gauge)	Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Livin □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soi □ Stunted or Stressed Plants (D1) (L (B7) □ Other (Explain in Remarks) • (B8) No □ Depth (inches): □ □ Depth (inches): □ □ Depth (inches): □ □ Depth (inches): □	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) RR A) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7) Wetland Hydrology Present? Yes 💢 No □
Wetland Hydrology Indicators: Primary Indicators (minimum of one requication of some requication) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Water Table Present? Yes Saturation Present? Yes Saturation Present? Yes Market Market Present (Stream gauge) Describe Recorded Data (stream gauge)	Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Livin □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soi □ Stunted or Stressed Plants (D1) (L (B7) □ Other (Explain in Remarks) • (B8) No □ Depth (inches): □ □ Depth (inches): □ □ Depth (inches): □ □ Depth (inches): □	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) RR A) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7) Wetland Hydrology Present? Yes 💢 No □

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region Project/Site: Lindshier Due City/County: Bellinghous Sampling Date: 5/4/22

Applicant/Owner: Cool Bunnings Construction State: WM Sampling Point: DP-15 Investigator(s): E.Miller Section, Township, Range: 16 /32 N/02 E Landform (hillstope, terrace, etc.): Local relief (concave, convex, none): Co VXX Stope (%): O Subregion (LRR): ______ Lat: _____ Long: _____ Datum: _____ NWI classification: VE 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 Yes □ No 🔯 Hydric Soil Present? within a Wetland? Yes No X Yes □ No 🏿 Wetland Hydrology Present? Remarks: upland VEGETATION - Use scientific names of plants. Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: Stratum (Plot size:) % Cover Specie: 80 % Cover Species? Status Number of Dominant Species (A) ____ That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: _ (B) Percent of Dominant Species = Total Cover That Are OBL, FACW, or FAC: Sapling/Shrub Stratum (Plot size:) OJ Fach Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species _____ x 1 = ____ FACW species _____ x 2 = ____ FAC species _____ x3=____ _____ = Total Cover FACU species _____ x4 = ____ Herb Stratum (Plot size: UPL species _____ x 5 = ____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: ☐ Rapid Test for Hydrophytic Vegetation ☐ Dominance Test is >50% Prevalence Index is ≤3.0¹ ☐ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Wetland Non-Vascular Plants¹ 10. _____ ☐ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must ____ = Total Cover be present, unless disturbed or problematic. Woody Vine Stratum (Plot size:) Hydrophytic Vegetation _____ = Total Cover Present? Yes □ No 🕱 % Bare Ground in Herb Stratum _____ Remarks:

Sampling Point: 00-15

Profile Description: (Describe to the d	epth needed to document the indicator or cor	nfirm the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ Loc	
0-7 10-12-3/3		loam
7-16 10-18-3/6		(oam
Type: C=Concentration, D=Decletion, F	RM=Reduced Matrix, CS=Covered or Coated San	d Grains. ² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to	all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	☐ Sandy Redox (S5)	2 cm Muck (A10)
Histic Epipedon (A2)	Stripped Matrix (S6)	☐ Red Parent Material (TF2) A 1) ☐ Very Shallow Dark Surface (TF12)
☐ Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLR/	Other (Explain in Remarks)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)	Office (Exhibit as Monday)
☐ Depleted Below Dark Surface (A11)☐ Thick Dark Surface (A12)	☐ Depleted Matrix (F3) ☐ Redox Dark Surface (F6)	3Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):	•	
Type:		
Depth (inches):		Hydric Soll Present? Yes ☐ No 📈
Remarks:		
j .		
HADBOI OGA		
HYDROLOGY		
Wetland Hydrology Indicators:	ilred; check all that apoly)	Secondary Indicators (2 or more required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requ	ulred; check all that apply) ☐ Water-Stained Leaves (B9) (except	
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1)	Water-Stained Leaves (89) (except	
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2)	☐ Water-Stained Leaves (89) (except 1, 2, 4A, and 4B)	MLRA Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators: Primary Indicators (minimum of one requirements of the control of	Water-Stained Leaves (89) (except	MLRA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	 □ Water-Stained Leaves (89) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) 	MLRA
Wetland Hydrology Indicators: Primary Indicators (minimum of one requ □ Surface Water (A1) □ High Water Table (A2) □ Saturation (A3) □ Water Marks (B1) □ Sediment Deposits (B2)	 □ Water-Stained Leaves (89) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) 	MLRA
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	 □ Water-Stained Leaves (89) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living □ Presence of Reduced Iron (C4) 	MLRA
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	 □ Water-Stained Leaves (89) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living 	MLRA
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	□ Water-Stained Leaves (89) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soil: □ Stunted or Stressed Plants (D1) (LF	MLRA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) S (C6) FAC-Neutral Test (D5) RR A) Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery	□ Water-Stained Leaves (89) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soil: □ Stunted or Stressed Plants (D1) (LF	MLRA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) S (C6) FAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	□ Water-Stained Leaves (89) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soil: □ Stunted or Stressed Plants (D1) (LF	MLRA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) S (C6) FAC-Neutral Test (D5) RR A) Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one regular of surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations:	□ Water-Stained Leaves (89) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soil □ Stunted or Stressed Plants (D1) (LF	MLRA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) S (C6) FAC-Neutral Test (D5) RR A) Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requirement of surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Yes	□ Water-Stained Leaves (89) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soil □ Stunted or Stressed Plants (D1) (LF	MLRA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) S (C6) FAC-Neutral Test (D5) RR A) Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requirement of surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations:	□ Water-Stained Leaves (89) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soil: □ Stunted or Stressed Plants (D1) (LF (B7) □ Other (Explain in Remarks) □ Depth (inches): □ Depth (inches):	MLRA
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Wetland Hydrology Indicators: Primary Indicators (minimum of one requirement) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Water Table Present? Yes Saturation Present? Yes	Usater-Stained Leaves (89) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soil □ Stunted or Stressed Plants (D1) (LF (B7)) □ Other (Explain in Remarks) Depth (inches): □ Depth (inches):	MLRA
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Wetland Hydrology Indicators: Primary Indicators (minimum of one requirement) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Water Table Present? Yes Water Table Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge	Usater-Stained Leaves (89) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living □ Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soil □ Stunted or Stressed Plants (D1) (LF (B7)) □ Other (Explain in Remarks) Depth (inches): □ Depth (inches):	MLRA

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region Project/Site: Lindshier Ave City/County: Bellinghous Sampling Date: 5/5/22 Applicant/Owner: Cool Runnings Construction State: We Sampling Point: DP-16 Investigator(s): E.Miller Section, Township, Range: 16 /32 W/02 E Landform (hillslope, terrace, etc.): Slope (%): 2-4 Subregion (LRR): Lat: Long: Datum: Soil Map Unit Name: _____ 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 Hydric Soil Present? Yes ⊠ No 🗆 within a Wetland? Yes 🔼 No 🗌 Wetland Hydrology Present? Yes ☑ No □ Remarks: W VEGETATION - Use scientific names of plants. Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size:) 1. Alma m & V Fac % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: (B) Percent of Dominant Species = Total Cover That Are OBL, FACW, or FAC: Sapling/Shrub Stratum (Plot size: ____) 1. Rubus OP Prevalence Index worksheet: Total % Cover of: Multiply by: 3. OBL species _____ x1=___ FACW species _____ x 2 = ____ FAC species ____ x3=___ FACU species ____ x 4 = ____ = Total Cover Herb Stratum (Plot size) UPL species _____ x 5 = ____ Column Totals: _____ (A) ____ (B) Prevalence Index = B/A = 4. Ustica 10 Fuc Hydrophytic Vegetation Indicators: ☐ Rapid Test for Hydrophytic Vegetation ☑ Dominance Test is >50% _____ Prevalence Index is ≤3.0¹ ☐ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Wetland Non-Vascular Plants¹ 10. ☐ Problematic Hydrophytic Vegetation¹ (Explain) 1 Indicators of hydric soil and wetland hydrology must = Total Cover Woody Vine Stratum (Plot size:) be present, unless disturbed or problematic. Hydrophytic

_____ = Total Cover

Remarks:

% Bare Ground in Herb Stratum _____

Yes ☑ No 🗆

Vegetation

Present?

put needed to docum		laicatoi	OL COUR	m the absen	ce of marc	1013.)
Redox	x Features					1
Color (moist)	<u>%</u>	Type	Loc*	<u>rexture</u>		Remarks
				Sand	100	
10-123/4	2_	<u></u>	m	colshl	1 sur	loan
					ے 	
			 			
√=Reduced Matrix, CS	S=Covered	or Coat	ed Sand (Grains. 2	Location: P	L=Pore Lining, M=Matrix.
II LRRs, unless other	rwise note	ed.)		Huic		roblematic Hydric Soils³:
☐ Stripped Matrix	(S6)				led Parent N	Material (TF2)
			t MLRA 1			
				Цζ	ither (Explai	in in Remarks)
				3 _{Indi}	ators of hw	drophytic vegetation and
		71				ology must be present,
		"				ed or problematic.
C) (redox pobless)						
				Hydric 8	Soil Presen	t? Yes ⊠ No 🏻
					econdani In	dicators (2 or more required)
red; check all that app	ly)					dicators (2 or more required)
☐ Water-Sta	ined Leave		except M] Water-Sta	ined Leaves (B9) (MLRA 1, 2,
☐ Water-Sta 1, 2, 4	ined Leave A, and 4B)		except M	LRA	Water-Sta 4A, at	ined Leaves (B9) (MLRA 1, 2, nd 4B)
☐ Water-Sta 1, 2, 4. ☐ Salt Crust	ined Leave A, and 4B) (B11))	except M	LRA [Water-Sta 4A, ar Drainage	ined Leaves (B9) (MLRA 1, 2, nd 4B) Patterns (B10)
☐ Water-Sta 1, 2, 4. ☐ Salt Crust ☐ Aquatic In	ined Leave A, and 4B) (B11) vertebrates) s (B13)	эхсерt М	LRA	Water-Sta 4A, ar Drainage Dry-Seas	ined Leaves (B9) (MLRA 1, 2, nd 4B) Patterns (B10) on Water Table (C2)
☐ Water-Sta 1, 2, 4. ☐ Salt Crust ☐ Aquatic In ☐ Hydrogen	ined Leave A, and 4B) (B11) vertebrates Sulfide Od) s (B13) lor (C1)		LRA	Water-Sta 4A, ar Drainage Dry-Sease Saturation	ined Leaves (B9) (MLRA 1, 2, nd 4B) Patterns (B10) on Water Table (C2) n Visible on Aerial Imagery (C9)
☐ Water-Sta 1, 2, 4. ☐ Salt Crust ☐ Aquatic In ☐ Hydrogen ☐ Oxidized F	ined Leave A, and 4B) (B11) vertebrates Sulfide Od Rhizospher) s (B13) lor (C1) res alonç	ı Living R	LRA	Water-Sta 4A, ar Drainage Dry-Sease Saturation Geomorp	ined Leaves (B9) (MLRA 1, 2, nd 4B) Patterns (B10) on Water Table (G2) n Visible on Aerial Imagery (C9) nic Position (D2)
☐ Water-Sta 1, 2, 4. ☐ Salt Crust ☐ Aquatic In ☐ Hydrogen ☐ Oxidized I ☐ Presence	ined Leave A, and 4B) (B11) vertebrates Sulfide Od Rhizospher of Reduce) s (B13) lor (C1) res alonç d Iron (C	ı Living R (4)	coots (C3)	Water-Sta 4A, ar Drainage Dry-Sease Saturation Geomorph Shallow A	ined Leaves (B9) (MLRA 1, 2, nd 4B) Patterns (B10) on Water Table (C2) n Visible on Aerial Imagery (C9)
☐ Water-Sta 1, 2, 4. ☐ Salt Crust ☐ Aquatic In ☐ Hydrogen ☐ Oxidized I ☐ Presence ☐ Recent Irc	ined Leave A, and 4B; (B11) vertebrates Sulfide Od Rhizospher of Reduce on Reduction) s (B13) for (C1) res alonç d Iron (C on in Tillo	j Living R 34) ed Soils (1	coats (C3)	Water-Sta 4A, ar Drainage Dry-Sease Saturation Geomorph Shallow A FAC-Neu	ined Leaves (B9) (MLRA 1, 2, and 4B) Patterns (B10) on Water Table (C2) of Visible on Aerial Imagery (C9) hic Position (D2) equitard (D3)
☐ Water-Sta 1, 2, 4. ☐ Salt Crust ☐ Aquatic In ☐ Hydrogen ☐ Oxidized I ☐ Presence ☐ Recent Iro ☐ Stunted on	ined Leave A, and 4B, (B11) vertebrated Sulfide Od Rhizospher of Reduce on Reduction Stressed) s (B13) for (C1) res alonç d fron (C on in Tille Plants (I	j Living R 34) ed Soils (1	coots (C3)	Water-Sta 4A, at Drainage Dry-Sease Saturation Geomorp Shallow A FAC-Neu Raised Al	ined Leaves (B9) (MLRA 1, 2, and 4B) Patterns (B10) on Water Table (C2) on Visible on Aerial Imagery (C9) inic Position (D2) equitard (D3) tral Test (D5)
☐ Water-Sta 1, 2, 4. ☐ Salt Crust ☐ Aquatic In ☐ Hydrogen ☐ Oxidized F ☐ Presence ☐ Recent Irc ☐ Stunted or	ined Leave A, and 4B, (B11) vertebrated Sulfide Od Rhizospher of Reduce on Reduction Stressed) s (B13) for (C1) res alonç d fron (C on in Tille Plants (I	j Living R 34) ed Soils (1	coots (C3)	Water-Sta 4A, at Drainage Dry-Sease Saturation Geomorp Shallow A FAC-Neu Raised Al	ined Leaves (B9) (MLRA 1, 2, and 4B) Patterns (B10) On Water Table (C2) In Visible on Aerial Imagery (C9) Into Position (D2) Inquitard (D3) Itral Test (D5) Int Mounds (D6) (LRR A)
☐ Water-Sta 1, 2, 4. ☐ Salt Crust ☐ Aquatic In ☐ Hydrogen ☐ Oxidized I ☐ Presence ☐ Recent Iro ☐ Stunted on	ined Leave A, and 4B, (B11) vertebrated Sulfide Od Rhizospher of Reduce on Reduction Stressed) s (B13) for (C1) res alonç d fron (C on in Tille Plants (I	j Living R 34) ed Soils (1	coots (C3)	Water-Sta 4A, at Drainage Dry-Sease Saturation Geomorp Shallow A FAC-Neu Raised Al	ined Leaves (B9) (MLRA 1, 2, and 4B) Patterns (B10) On Water Table (C2) In Visible on Aerial Imagery (C9) Into Position (D2) Inquitard (D3) Itral Test (D5) Int Mounds (D6) (LRR A)
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Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Irc Stunted on (B7) Other (Expense)	ined Leave A, and 4B; (B11) vertebrates Sulfide Od Rhizospher of Reduce on Reduction Stressed plain in Re	s (B13) for (C1) res alonç d fron (C on in Till Plants (I marks)	j Living R 34) ed Soils (1	coots (C3)	Water-Sta 4A, at Drainage Dry-Sease Saturation Geomorp Shallow A FAC-Neu Raised Al	ined Leaves (B9) (MLRA 1, 2, and 4B) Patterns (B10) On Water Table (C2) In Visible on Aerial Imagery (C9) Into Position (D2) Inquitard (D3) Itral Test (D5) Int Mounds (D6) (LRR A)
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Water-Sta 1, 2, 4. Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc Stunted or (B7) Other (Exp (B8) No Depth (inche	ined Leave A, and 4B] (B11) vertebrates Sulfide Od Rhizospher of Reduce on Reductle or Stressed plain in Re	s (B13) for (C1) res along d Iron (C on in Till Plants (I marks)) Living R (4) ed Soils (i O1) (LRR	oots (C3)	Water-Sta 4A, ar AA, ar Drainage Dry-Sease Saturation Geomorp Shallow A FAC-Neu Raised Ar Frost-Hea	ined Leaves (B9) (MLRA 1, 2, and 4B) Patterns (B10) on Water Table (C2) a Visible on Aerial Imagery (C9) and Position (D2) aquitard (D3) ara Test (D5) art Mounds (D6) (LRR A) ave Hummocks (D7)
Water-Sta 1, 2, 4. Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc Stunted on (B7) Other (Exp (B8) No Depth (inche	ined Leave A, and 4B] (B11) vertebrates Sulfide Od Rhizospher of Reduce on Reductle or Stressed plain in Re	s (B13) for (C1) res along d Iron (C on in Till Plants (I marks)) Living R (4) ed Soils (i O1) (LRR	oots (C3)	Water-Sta 4A, ar AA, ar Drainage Dry-Sease Saturation Geomorp Shallow A FAC-Neu Raised Ar Frost-Hea	ined Leaves (B9) (MLRA 1, 2, and 4B) Patterns (B10) on Water Table (C2) a Visible on Aerial Imagery (C9) and Position (D2) aquitard (D3) ara Test (D5) art Mounds (D6) (LRR A) ave Hummocks (D7)
Water-Sta 1, 2, 4. Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc Stunted on (B7) Other (Exp (B8) No Depth (inche	ined Leave A, and 4B] (B11) vertebrates Sulfide Od Rhizospher of Reduce on Reductle or Stressed plain in Re	s (B13) for (C1) res along d Iron (C on in Till Plants (I marks)) Living R (4) ed Soils (i O1) (LRR	oots (C3)	Water-Sta 4A, ar AA, ar Drainage Dry-Sease Saturation Geomorp Shallow A FAC-Neu Raised Ar Frost-Hea	ined Leaves (B9) (MLRA 1, 2, and 4B) Patterns (B10) on Water Table (C2) a Visible on Aerial Imagery (C9) and Position (D2) aquitard (D3) ara Test (D5) art Mounds (D6) (LRR A) ave Hummocks (D7)
Water-Sta 1, 2, 4. Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc Stunted on (B7) Other (Exp (B8) No Depth (inche	ined Leave A, and 4B] (B11) vertebrates Sulfide Od Rhizospher of Reduce on Reductle or Stressed plain in Re	s (B13) for (C1) res along d Iron (C on in Till Plants (I marks)) Living R (4) ed Soils (i O1) (LRR	oots (C3)	Water-Sta 4A, ar AA, ar Drainage Dry-Sease Saturation Geomorp Shallow A FAC-Neu Raised Ar Frost-Hea	ined Leaves (B9) (MLRA 1, 2, and 4B) Patterns (B10) on Water Table (C2) a Visible on Aerial Imagery (C9) and Position (D2) aquitard (D3) ara Test (D5) art Mounds (D6) (LRR A) ave Hummocks (D7)
Water-Sta 1, 2, 4. Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc Stunted on (B7) Other (Exp (B8) No Depth (inche	ined Leave A, and 4B] (B11) vertebrates Sulfide Od Rhizospher of Reduce on Reductle or Stressed plain in Re	s (B13) for (C1) res along d Iron (C on in Till Plants (I marks)) Living R (4) ed Soils (i O1) (LRR	oots (C3)	Water-Sta 4A, ar AA, ar Drainage Dry-Sease Saturation Geomorp Shallow A FAC-Neu Raised Ar Frost-Hea	ined Leaves (B9) (MLRA 1, 2, and 4B) Patterns (B10) on Water Table (C2) a Visible on Aerial Imagery (C9) and Position (D2) aquitard (D3) ara Test (D5) art Mounds (D6) (LRR A) ave Hummocks (D7)
	M=Reduced Matrix, CS LRRs, unless other Sandy Redox (Sinpped Matrix Loamy Mucky Miles Loamy Gleyed Matrix Loamy Gleyed Matrix Redox Dark Sur	M=Reduced Matrix, CS=Covered II LRRs, unless otherwise note Sandy Redox (S5) Stripped Matrix (S6) Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Redox Depressions (F8)	M=Reduced Matrix, CS=Covered or Coate II LRRs, unless otherwise noted.) Sandy Redox (S5) Stripped Matrix (S6) Loamy Mucky Mineral (F1) (exceptom Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8)	Color (moist) % Type¹ Loc² \[\lambda \rangle \frac{3}{4} \rangle 2 \rangle \frac{4}{4} \] M=Reduced Matrix, CS=Covered or Coated Sand of the co	Color (molst) % Type1 Loc2 Texture South South Color South Color South South Color South S	Color (moist) % Type¹ Loc² Texture Sand Joan 10 \ 10^3/4 \ 2 \ C \ M \ Colomby Sand M=Reduced Matrix, CS=Covered or Coated Sand Grains. 2Location: P II LRRs, unless otherwise noted.) Indicators for Point Indicators

Appendix D 2014 Ecology Wetland Rating Forms



RATING SUMMARY – Western Washington

Name of wetland (or 10 #): Landshier - 14 pate of site visit: 5 4 2	Rated by Environ Land Landson Trained by Ecology? 2 Ves No Date of training 2015	HGM Class used for rating A P N Wetland has multiple HGM classes? Y N
Name of wetland (Rated by M. W.	HGM Class used fo

NOTE: Form is not complete without the figures requested (figures can be combined). Source of base aerial photo/map

OVERALL WETLAND CATEGORY (based on functions of or special characteristic)

1. Category of wetland based on FUNCTIONS Category I – Total score = 23 - 27

Category I – Total score = 23 - 27

Category II – Total score = 16 - 19

Category II – Total score = 16 - 19

Category IV – Total score = 9 - 15

Score for each function based on three ratings (order of ratings is not important)

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
	Ċ.	Circle the appropria	propriate ratings	
Site Potential	Y (W) H	ار چ ت	€ ≥	
Landscape Potential	π Θ	± (€)	_ ≥ =	
Value	 ⊠ (∓)	- E	I) M L	TOTAL
Score Based on Ratings	Q	Ŋ	N	-2

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIG	CATEGORY
Estuarino	II II
Wetland of High Conservation Value	I
308	-
Mature Forest	I
Old Growth Forest	M
Coastal Lagoon	пп
Interdunal	n n n
None of the above	7
The state of the s	

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Wedand name or number

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

was or	To answer questions: Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4
Hydroperiods	D14, H1,2
Location of outlet (can be added to map of hydroperiods)	01.1,04.1
Boundary of area within 150 ft of the wetland (can be added to another figure) 0 2.2, D 5.2	02.2, 05.2
Map of the contributing basin	D4.3, D 5.3
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2, 2, H 2.3
polygons for accossible habitat and undisturbed habitat	
Screen capture of map of 303(d) listed waters in basin (from Ecology website) D 3.1, D 3.2	D3.1, D3.2
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D3,3

Riverine Wetlands

INIAD OF	To answer questions: Figure #	=
plant classes	H1.1, H1.4	
Hydroperiods	H1.2	Γ
Panded depressions	RII	Τ
Boundary of area within 150 ft of the wetland (can be added to another figure)	R 2.4	Γ
Plant cover of trees, shrubs, and herbaceous plants	R12, R4.2	Г
Width of unit vs. width of stream (can be added to another figure)	R 4.1	Τ
Map of the contributing basin	R 2.2, R 2.3, R 5.2	Γ
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	Γ
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	83.1	Γ
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	R 3.2, R 3.3	Γ
		1

Lake Fringe Wetlands

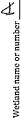
9 x H,H,H 8 x H,H,H 7 x H,H,L 7 x H,H,L 6 x H,M,L 6 x H,M,L 5 x H,L,L 5 x M,M,L 4 x M,L,L 4 x M,L,L 3 x L,L,L

Map of	To answer questions: Figure #	Figure #
Cowardin plant classes	L11, L41, H11, H14	
Plant cover of trees, shrubs, and herbaceous plants	1.1.2	
Boundary of area within 150 ft of the wetland (can be added to another figure)	12.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - Including	H 2.1, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website) L3.1, L3.2	13.1, 13.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	13.3	

Slope Wetlands

Map of:	To answer questions: Figure #	Figure #
lant classes	H1,1, H1,4	
Hydroporiods	H 1,2	
Plant cover of dense trees, shrubs, and herbaccous plants	\$1.3	
Plant cover of dense, rigid trees, shrubs, and herbacoous plants	54.1	
(can be added to figure above)		
Boundary of 150 ft buffer (can be added to another figure)	52.1, 55.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	53,1,53,2	
Scroen capture of list of TMDLs for WRIA in which unit is found (from web)	53.3	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		

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HGM Classification of Wetlands in Western Washington

probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you For questions 1.7, the criteria described must apply to the entire unit being rated. questions 1-7 apply, and go to Question 8.

Are the water levels in the entire unit usually controlled by tides except during floods?

%NO → go to 2

YES - the wetland class is Tidal Fringe - go to 1.1

1.1 Is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

NO - Saltwater Tidal Fringe (Estuarine)

fyour wetland can be classified as a Freshwater Tidal Fringe use the forms for Riverine wetlands. If it is Saltwater Tidal Fringe it is an Estuarine wetland and is not scored. This method cannot be used to YES - Freshwater Tidal Fringe score functions for estuarine wetlands. The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit. ત્યં

YES - The wetland class is Flats NO) go to 3 Frour wetland can be classified as a Flats wetland, use the form for **Depressional** wetlands.

The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size; 3. Does the entire wetland unit meet all of the following criteria?

At least 30% of the open water area is deeper than 6.6 ft (Z m).

YES - The wetland class is Lake Fringe (Lacustrine Fringe)

Does the entire wetland unit meet all of the following criteria?

The wetland is on a slope (slope can be very gradual).

The water flows through the wetland in one direction (unidirectional) and usually comes from

seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks, The water leaves the wetland without being impounded.

NO -)go to 5

rES – The wetland class is Slope

NOTE: Surface water does not pond in these type of wetlands except occasionally in very small and shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft deep).

Does the entire wetland unit meet all of the following criteria?

The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or rive

The overbank flooding occurs at least once every 2 years.

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NO } go to 6

Vetland name or number

40 TE. The Riverine unit can contain depressions that are filled with water when the river is not YES - The wetland class is Riverine flooding Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the surface, at some time during the year? This means that any outlet, if present, is higher than the interior of the wetland.

NO - go to 7

YES - The wettand class is Depressional

Is the entire wedand unit located in a very flat akerwith no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural ~

NO - go to 8

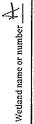
YES - The wetland class is Depressional

AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT Your wetland unit seems to be difficult to classify and probably contains several different HGM wetland unit being scored. တံ

more of the total area of the wedand unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wedand using the class that represents more than 90% of the NOTE: Use this table only if the class that is recommended in the second column represents 10% or

HGM classes within the wetland unit	HGM class to
beingrated	use in rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake Fringe	Lake Fringe
Depressional + Riverine along stream	Depressional
within boundary of depression	
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other	Treatas
class of freshwater wetland	ESTUARINE

lf you are still unable to determine which of the above criteria apply to your wetland, or if you have more than 2 HGM classes within a wetland boundary, classify the wetland as Depressional for the



DEPRESSIONAL AND FLATS WETLANDS

Water Quality Functions - Indicators that the site functions to improve water quality,
D.1.0. Does the site have the potential to improve water quality?

0.1.1. Changing of surface water outflows from the weiting:
Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet).

17 N 3 0 11.2. The sell 2.1h below the surface for duff layer) is true clay or true organic (use NRCS definitions) Yes = 4 No (0) 11.3. Characteristics and distribution of persistent plants (Emergent, Semb-shrub, and/or Forested Cowardin classes): Wetland has persistent, ungrazed, plants > 95% of area Wetland has an Intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. points = 4 points and points = 1 Add the points in the boxes above points = 0 points = 1 points # Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. This is the area that is ponded for at least 2 months. See description in manual Wetland has persistent, ungrazed plants $> \frac{1}{4}$ of area Wetland has persistent, ungrazed, plants > 1/2 of area Wetland has persistent, ungrazed plants $<^1/_{10}$ of area Area seasonally ponded is > % total area of wetland Area seasonally ponded is > % total area of wetland Area seasonally ponded is < ½ total area of wetland D.1.4. Characteristics of seasonal ponding or Inundation: Total for D 1

Rating of Site Potential If score is: 12-16 # H 6-11 # M 0-5 # L Record the rating on the first page

D 2.0. Does the landscape have the potential to support the water quality function of the site?	s site?	
D 2.1. Does the wetland unit receive stormwater discharges?	Yos # 1 No (O)	٥
D 2.2. is $>$ 10% of the area within 150 ft of the wedand in land uses that generate pollutants?	Yes 1 Note Q	၁
D 2.3. Are there septic systems within 250 ft of the wetland?	Yes = 1 No (-0)	୍ଦ
D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.3D 2.3? - Source	ns D 2.1-D 2.3? Yes = 1 No £0)	0
Total for D 2	Add the points in the boxes above	Ø
Property of the state of the st	7	

Rating of Landscape Potential If score is: 3 or 4 = H ____1 or 2 = M ___0 = L Record the rating on the first page

D 3.0. Is the water quality improvement provided by the site valuable to society?

D 3.1. Does the weetand discharge directly (i.e., within 1 mi) to a stream, river, lake, or manne water that is on the of 203(d) list?

D 3.2. Is the wetland in a basin or sub-basin where an aquate resource is on the 303(d) list?

D 3.2. Is the site been identified in a watershad or local plan as important for maintaining water quality (important for maintaining

Rating of Value If score is: \$\int 2-4 m H _ 1 m M _ 0 m L

Record the rating on the first page

3,2 Squalitum Cr.

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Wetland name or number __

M Second the rating on the first pa O Hydrologic Functions - indicators that the site functions to reduce flooding and stream degradation D 40. Does the site have the potential to reduce flooding and erosion? Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlotpoints (2) Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch points = 1 D 4.2. <u>Opeth of stones durher wet periods;</u> Entimate the height of panaling above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if any, the deepest part. Marks of ponding are 3 for more above the surface or bottom of outlet. Marks of ponding between 2 ft for 3 ft from surface or bottom of outlet Marks of ponding between 2 ft for 3 ft from surface or bottom of outlet Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet points = D points#5 points # 3 points = 0 Add the points in the boxes above D 4.3. <u>Contribution of the wetland to storage in the watershed</u>: Estimate the ratio of the orea of upstream basin Metland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing **DEPRESSIONAL AND FLATS WETLANDS** Wetland is a depression or flat depression with no surface water leaving it (no outlet) contributing surface water to the wetland to the area of the wetland unit itself. The area of the basin is loss than 10 times the area of the unit Wetland is flat but has small depressions on the surface that trap water The area of the basin is 10 to 100 times the area of the unit. The area of the basin is more than 100 times the area of the unit D 4.1. Characteristics of surface water outflows from the wetland: 12-16 #H V G-11 = M Marks of ponding less than 0.5 ft (6 in) The wetland is a "headwater" wetland Entire wetland is in the Flats class Rating of Site Potential If score is: Total for D 4

D 5.0. Does the landscape have the potential to support hydrologic functions of the site?		
D S.1. Does the wetland receive stormwater discharges?	Yes=1 No(-0)	0
D 5.2. Is >10% of the area within 150 ft of the wotland in land uses that generate excess runoff? Yes = 1 No of D	Yes=1 No 🕙	9
0.5.3. is more than 25% of the contributing basin of the wedand covered with intensive human land uses (residential at >1 residential at Yes = 1 No #0)	d uses (residential at Yes = 1 No = 0	િ
Total for D 5	Add the points in the boxes above	Ø

Ruting of Landscape Potential |# score |s:__3 ** H __1 or 2 = M __0=1 Record the rating on the first page

D 6.0. Are the hydrologic functions provided by the aire valuable to society?

D 6.1. Incurring the in a Incidence for a Reconstitution of the description had been matches conditions around the weighted unit being rated. Do not read points, Choose, the highest secret mour ting one condition is met, The weighted with being rated. Do not water that would obtain white highest such a spurer surface water that would obtain obtained with orders where flooding has

Flooding occurs in a sub-basin that is Immodiately down-gradient of unit.
 Surface flooding problems are in a sub-basin farther down-gradient.
 Flooding from groundwater is an issue in the sub-basin.

damaged human or natural resources (e.g., houses or salmon redds);

The existing or potential outflow from the wetland is so constrained by human or natural conditions that the water stored by the wetland cannot reach areas that flood. *Explain why*

There are no problems with flooding downstream of the wedand.

D.6.2. Has the site been identified as Important for flood storage or flood conveyance in a regional flood control plan?

Total for D 6

Add the points in the boxes above | Canal Oct | Record the rating on the first page

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RIVERINE AND FRESHWATER TIDAL FRINGE WETLANDS

Water Quality Functions - Indicators that the site functions to improve water quality R 1.0. Does the site have the potential to improve water quality? R 1.1. Area of surface demansions within the Riverine wetland that can trap sediments during a flooding event:	
trap sediments during a flooding o	
R.1.1. Area of surface depressions within the Riverine wetland that can trap sediments during a flooding event:	
Depressions cover > / Auteur of Westland	`
Depressions cover > 1/2 area of wetland	\
Depressions present but cover < 1/2 area of wetland	_
No depressions present	
with >90% cover at person height, not Cowardin classes)	
Trees or shrubs > 2/3 area of the wetland	
Trees or shrubs > 1/1 area of the wetland	
Herbaceous plants (> 6 in high) > 2/3 area of the wetland	
\	
Trees, shrubs, and ungrazed herbaceous < 1/1 area of the wetland	
Total for R.1 Add the points in the boxes above	
Rading of Site Potential if score is: 12-16 # H6-11 = M6-5 = L Record the rading on the first page	he first page
R 2.0. Does the landscape have the potential to support the water guality function of the site?	
R.2.1. is the wetland within an incorporated dity or within its UGA? /	
R 2.2. Does the contributing basin to the wetland include a UGA or incorporated area? Yes # 1 No # 0	
R 2.3. Doos, at loss 10% of the contributing basin contain tilfed floids, pastures, or forests that have been clearent within the last 5 years?	
R 2.4. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? Yes w 1 No w 0	
R.2.5. Are there other sources of pollutants copying into the wetland that are not listed in questions R.2.3.R.2.4 Other sources $\gamma_{CC=1}$ Now 0	
Total for R.2 Add the points in the boxes above	
Rating of Landscape Potential If score is: 3-6 " H 10.2" M 0 = L Record the rating on the first page	he first page
R 3.0. Is the water quality improvement provided by the site valuable to society?	
R 3.1. Is the wetland alonged stream or river that Is on the 303(d) list or on a tributary that drains to one within 1 mi?	
Yes H 1 Now 0	
R.3.2. Is the wedding along a stream or river that has TMDL limits for nutrients, toxics, or pathogens?	
Yes=1 No=0	
R.3.3. Hapfitte site been identified in a watershed or local plan as important for maintaining water quality? <i>(answer XFC) if there is a Tuthi for the deningsole which the mile is found</i> .	
Add the nature in the	
Ino Service Land Ask Dat	A - 4

Hydrologic Functions — Indicators that site functions to reduce flooding and stream erosion R 4.0. Does the site have the potential to reduce flooding and erosion? R 4.1. Characteristics of the overland propage the overland provides: Estimate the overage width of the westland provides: Estimate the overage width of the westland provides: Estimate the overage width of the westland provides: If the ratio is now than 20 If the ratio is 10-20 If the ratio is 20-20 If the ratio is 12-50 If the ratio is 12-50 If the ratio is 1-5 If the ratio is 1-5 If the ratio is 1-5 If the ratio is 1-5 Record the rating on the first page R 4.2. Characteristics of plants that slow down water velocities during floods: Treat large weedy debris as forest or strub. Choose the points appropriate for the best description (polygons needed have 290% cover at person height. These are NOT, Courte for the plants of the points are not or shrub for > 1, area OR emergent plants > 2, area Forest or shrub for > 1, area OR emergent plants > 1, area Paints do not meet above criteria Points = 4 Points = 4 Points = 4 Points = 4 Points = 4 Points = 4 Points = 4 Points = 4 Points = 4 Points = 4 Add the points in the boxes above 0-5=1 Rating of Site Potential If score is: 12-16 = H 6-11 = M Total for R 4

e first page	Record the rating on the first page	Rating of Landscape-Potential If score is: 3 # H 1 or 2 # M 0 # L
	Add the points in the boxes above	Total for R.5
	Yes=0 No m 1	R 5.3. Is the up-gradient stream or river controlled by dams?
	Yes#1 No #0	R 5.2. Does the up-gradient watershed include a UGA or incorporated area?
	Yes#D No #I	R 5.1. Is the stream or river adjacent to the wetland downcut?
	unations of the site?	R 5.0. Does the landscapo have the potential/6 support the hydrologic functions of the site?
A Plant are of a		

R 6.0. Are the hydrologic functions provided by the site valuable to society?	
R 6.1. Distance to the nearest areas downstream that have flooding problems? Choose the description that best fits the site.	
The sub-basin immediately down-gradient of the wetland has flooding problems that result in damage to	
/ human or natural resources (e.g., houses or salmon redds)	
Surface flooding problems are in a sub-basin farther down-gradient	
No flooding problems anywhere downstream	
R 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan?	
Total for R 6 Add the points in the boxes above	
Rating of Value If score is: 2-4 = H _ 1 = M _ O = L	e first page

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HABITAT FUNCTION	These questio S - Indicators that sit	These questions apply to wetlands of all HGM dasses. HABITAT FUNCTIONS - indicators that site functions to provide important habitat	of all HGM dasses.	
H 1.0. Does the site ha	H 1.0. Does the site have the potential to provide habitat?	/ide habitat?		
H 1,1. Structure of plant dicowardin plant dicowardin plant dicogni of X ac or more the Aquatic bed	community; <i>Indicators are</i> asses in the wetland. <i>Up to</i> an 10% of the unit if it is s	e Cowardin classes and str o 10 patches may be comb mailer than 2.5 ac, Add th	H 1.1. Structure of plant community; Indicators are Cowardin classes and strate within the Forested class. Check the Cowardin plant classes in the wetland. Up to 3.0 patches may be combined for each class to meet the threshold of X are or more than 120k of the unit if it is smaller than 2.5 or, Add the number of structures or more choints = 4 ——Aquato bed. A structures or more points.	
Emorgent Scrub-shrub (Forested (are If the unit ha The Forested that each co	Emyrgent Scrub-shrub (areas where shrubs have > 30% cover) Forested (areas where trees have > 30% cover) If the unit has a forested class, check (f; The Forested class has 3 out of 5 strata (amopy, suit that each cover 20% within the Forested polygon	> 30% cover) % cover) f: f: odpolygen	Engygent Scructures: points = 2 Scructures: points = 1 I scructure: points = 1 If the unit has a forested class; check fit The forested class has a sure of 5 strata (canopy, sub-canopy, shrubs; herbaccous, moss/ground-cover) that each cover 20% within the forested polygon	Q
H 1.2. Hydroporiods Check tho types of water more than 10% of the wer Permanently flooded Seasonally flooded of Coessionally flooded of Seasonally flooding st Seasonally flowing Seasonally flowing Freshwater floor	operiods ktho types of water regimes (hydroperiods) prosent with han 10% of the weetland or K as to count (see text for de permanently flooded or inundated Seasonally flooded or inundated Seasonally flooded or inundated Seasonally flooded or inundated Permanently flowing stream or river in, or adjacent to, th Seasonally flowing stream in, or adjacent to, the wetland Lake Frings wetland Freshwater tidal wetland	Hydroperiods The water regimes (hydroperiods) present within the wetland. The water recovered to types of water regimes (hydroperiods). The water for descriptions of hydroperiods). Forman and hydroged or inundated Saturated only flooded or inundated Saturated only flowing stream or river in, or adjacent to, the wetland Sasonally flowing stream in, or adjacent to, the wetland This Freshwater tidal wetland Freshwater tidal wetland	Hydroperiods Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or is act count (see text for descriptions of hydroperiods). A or more types present: points = 3 Supress present: points = 3 Coessionally flooded or inundated 3 Saturated only Saturated only flowing stream or river in, or adjacent to, the wetland 1 Saturated only flowing stream or river in, or adjacent to, the wetland 2 Saturated only stream or river in, or adjacent to, the wetland 2 Saturated only wetland 2 Saturated only wetland 2 Saturated only management points = 0 Saturated only management to a diacent to, the wetland 2 Saturated only management points = 0 Saturated only management to a diacent to, the wetland 2 Saturated only management points = 0 Saturated only management points = 0	
H 1.3. Richness of plant spacies Count han on unber of plants Different patches of the sam the species. Do not include if you counted:> 12 species 5-13 species 5-13 species	t species or of plant species in the we s of the same species can be not include Eurasian milfo 19 species 5 - 19 species	Richness of plant species Count ho number of plant species in the wetland that cover at least 10 ft. ² Count the number of plant species can be complicated an ext the size this bifferent patches of the same species can be complicated an ext that species. Do not include Eurosian milfoll, reed conorgeross, purple loa if you counted: 13 species 5 - 13 species < Species < Species	Richness of plant species Court from number of plant species Court from number of plant species in the wetland that cover at least 10 ft?, Court for number of plant species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoll, reed canarygrass, purple loosestife, Canadian thistie the species. 5 - 19 species 6 - 19 species points = 2 pocies	
H 1.4. Interspersion of habitats Decide from the daggar the classes and unveget hove four or more plant None (0 points All three diagrams In this row are HGH # 3 points	biblists. Biggams bolow whother intersported areas (can influde or yvegested areas (can influde or yvegested areas or three elesses an known at point town at point town at point town at point town at the control of	the repersion of habitats: Decide from the abilitats: Decide from the abilitates below whother interspersion among Cowardin plants classes (a thre classes and unwegetated areas (can induce open water or muditals) is high, medecaste have jour or more plant classes or three classes and open water, the reting is olways high. Toward for popits Low = 1 point Moderni Moderni Toward in a points Low = 1 point Low = 2 point Moderni Moderni Toward in a points Moderni Toward in a points Toward in a points Low = 2 points	Interspersion of habitats: Decide from the algorized brown whorthor interspersion among Cowardin plants classes (described in H.1.1, or the classes and unwegetated areas (can include open water or mudifals) is high, moderate, low, or none. If you have jour or more plant classes or three classes and open water, the reting is always high. The classes are more plant classes or three classes and open water, the reting is always high. The classes are more plant classes or three classes and open water, the reting is always high. The classes are more plant classes or three classes and open water, the reting is always high. The classes are more plant classes or three classes and open water, the reting is always high. The classes are disparant and area is a point and a plant a plant a plant and a plant and a plant and a plant and a plant and a plant and a plant a plant and a plant and a plant a plant and a plant a plant and a plant and a plant a plant a plant and a plant a plant a plant and a plant	0

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Wetland name or number

H 1.5. Special habitat features:

Check the habitat foatures that are present in the wedand. The number of checks is the number of points.	
Large, downed, woody dobris within the wetland (> 4 in diameter and 6 ft long). \angle Standing snags (dbh > 4 in) within the wetland	••••
Undercut banks are present for at least 6.6 ft (2 m) and/or everhanging plants extends at least 3.3 ft (1 m) ever a stream (or ditch) in, or contiguous with the wotland, for at least 33 ft (10 m)	
Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree shapes of recent housing additional density and appropriate particular or transfer that have not appropriate to the particular or transfer to the	••••
where wood is exposed)	ر _~
At least X ac of thin-stemmed persistent plants or woody branches are present in areas that are	1
Destinationary of seasonally intingated (<i>sediciales</i>) or <i>egg-cying by amphibians</i>). Invasive plants cover loss than 25% of the wetland area in winer stratum of plants (see H.1.3 for list of	
strate)	
Total for H 1	И
Rating of Site Potential If score is: 15-18 # H 7-14 # M 4 G-6 # L Record the rating on the first page	e first page
H 2.0. Does the landscape have the potential to support the habitat functions of the site?	
habitat (include only habitat that directly abuts wedand unit). Jet. 15	
Calculate: % undisturbed habitat + {{% moderate and low intensity land uses}/2} = 10 %	
· .	
2 /3 (33.3.2%) of 1 km Polygon	
10-19% of 1km Polygon	
1 km Polygon around the wetland.	ŀ
Calculate: % undisturbed habitat + [(% moderate and low intensity land uses)/2] = 5 %	
	,
, ,	**ano
vi	
Undisturbed habitat < 10% of 1 km Polygon	
100	c
S 50% of 1 km Polygon is fight intensity and use S 50% of 1 km Polygon is fileh intensity)
Add the points in the bo	b
Rating of Landscape Potential if score is: 4-6=H 1-3 = M 1/2 < 1 = L Record the rating on the first page	: first page
H 3.0. is the habitat provided by the site valuable to society?	
H.3.1. Does the site provide habitat for species valued in laws, regulations, or policies? Choose only the highest score	
that applies to the wetland being rated.	
Significant of the following criteria:	
—— it ias s'or mote promy nabless within 100 m (see next page) —— It provides babitat for Threatened or Endinesered sheetler (any plant or palms) on the state on federal libel	(
transport as a location for an Individual WDFW priority species It is mapped as a location for an Individual WDFW priority species	
 It is a Wedand of High Conservation Value as determined by the Department of Natural Resources 	(
 It has been categorized as an important habitat site in a local or regional comprehensive plan, in a 	
anorente Mazcer Plan, or in a watershee plan. Site has 1 or 2 priority habitats (listed on next page) within 100 m	•
of the critic	
Ruting of Value If score is: \(Z = H \) I = M \) O = L	ne flrst page
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WDFW Priority Habitats

Priority habitars listed by WDEW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in Washington Department of Fish and Wildlife 2008. Priority Habitat and Species List. Olympia, Washington, http://wdfw.wdfw.wdfcw.diplications/00105/wdfw00165.pdf or access the list from here: http://wdfw.dom.org/post.gdf.pdf.or access the list from here:

Counthow many of the following priority habitates are within 330 (t (100 m) of the weetand unit. NOTE: This question is independent of the land use between the weetand unit and the priority habitat.

- Aspen Stands: Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- Biodiversity Areas and Corridors. Areas of habitat that are relatively important to various species of native fish and wildlie (full descriptions in WDFW PHS report).
- Herbaccous Balds: Variable size patches of grass and forbs on shallow soils over bedrock
- Old-growth/Mature forests: <u>Old-growth west of Gascade crest</u> Stands of at least 2 tree species, forming a multilayered canopy with accessional small openings; with at least 8 trees/ac (20 trees/ha) > 22 in (81 cm) dbh or > 200 years of age. <u>Mature forests</u> - Stands with average diameteries exceeding 21 in (53 cm) dbh; crown cover may be less than 100%; decay, decadence, numbers of snaps, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.
- Orogon White Oak: Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (full descriptions in WDFW PHS report p. 158 see web link above).
- Riparian: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.
- Westside Prairies: Herbacoous, non-forested plant communities that can either take the form of a dry prairie or a wet ρ prairie (full descriptions in WDFW PHS report p. 161 see web link above).
- Instream: The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources.
- Nearshore: Relatively undisturbed nearshore habitats. These Include Coastal Nearshore, Open Coast Nearshore, and
 Puget Sound Nearshore. (full descriptions of habitats and the definition of relatively undisturbed are in WDFW report—
 see web link on previous page).
- Caves: A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.
- Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.
- Talus: Homogenous areas of rock rubble ranging in average size 0.5 6.5 ft (0.15 2.0 m), composed of bassit, andesite, \(\times \text{ and/or sedimentary rock, including riprap sildes and mine tallings. May be associated with cliffs.
- Snags and Logs: Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to
 enable carvity excavation/use by wildlike. Priority snags have a diameter at breast height of 2.20 in (51 cm) in western
 Washington and are > 6.5 ft (2 m) in height. Priority logs are > 1.2 in (30 cm) in diameter at the largest end, and > 2.0 ft
 (6 m) long.

Note: All vegetated wetlands are by dofinition a priority habitat but are not included in this list because they are addressed

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Wetland name or number __

Wetland Type

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Check off any criterie that apply to the wetland. Claie the cotegory when the appropriate arteris are met.	
SC 1.0. Estuarine weeklands Doors the weeklands meet the following criteria for Estuarine weeklands? — The dominant water regime is deal,	
— Vogetated, and — With a salinity greater than 0.5 ppt Yes –60 to SC 1.1 / Nge Not an extuarine wetland	
SC 1.1. Is the wetland within a National Wildlife Refuge, National Park, National Extrary Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151? Yes = Category I No - Go to SC 1.2	Cat. 1
SC 1.2. Is the wedlind unit at least 1 ac in size and meets at least two of the following three conditions? —The wethod is relatively undertubed (has no deling, allering, silling, suitabling, granting, and has less than 10% cover of non-native plant species. (If non-native species are Specifier, see page 25) —At least X of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-	ā
mowoe grassland. — The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. Yes = Category! No = Category!	Gt.
SC 2.0. Wottands of High Conservation Value (WHCV) SC 2.1. Has the WA Department of Natural Resources updated their websito to Include the list of Walanna's of High Conservation Value? SC 2.2. Is the weband listed on the WOMR database as a Wedand of High Conservation Value?	Š
SC2.3: the wetland in a Section/Township/Range that contains a Natural Horizage wetland? https://www.i.dnr.wn.gov/nhp/recficesi/datassparch/wnthpword;ands.pdf Yos = Contact w/NHP/WDNR and go to SC2.4 (
SC 3.0. Bogs Doos the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? Use the key boos the wetland based on its functions. Use the key beat will still need to rate the wetland based on its functions. SC 3.1. Doos an area within the wetland unit have organic soil horizone, either peats or mucks, that compase 16 in or more of the first 32 in of the soil profile? SC 3.2. Doos an area within the wetland unit have organic soils, either peats or mucks, that are less than 16 in deep over bedreck, or an importmosble hardpan such as clay or volkanic ash, or that are fleating on top of a lake or pond? You – Go to SC 3.3. No – it not a bog.	
SC 33. Does an area with posts or muck have more than 70% cover of mosses at ground level, AND at loast a 30% cover of plant speciel listed to 19.04. Vora is a Category Log. NOTE: If you are uncortain about the extent of mosses in the understory, you may substitute that entrelien by mosturing the pH of the watter that scops into a hole dug at least 16 in deop. If the pH is less than 5.0 and the plant species in Table 4 are present, the wetland is a bog. SC 3.4. Is an area with posts or muck forested (> 30% cover) with Sika spruce, subalpine fit, western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the species (or combination of species) listed in Table 4 provides more than 30% of the cover underly changed (or combination of species) listed in Table 4 provides more than 30% of the cover underly how its not to bog. Vos. 18 a Category long.	Gt

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SC 4.0. Forested Wetlands

4 2 8 8 2 4 8 7	
Yes a Category I (Not a forested wetland for this section	G Ft.
SC S.O. Wetlands in Coastal Lagoons Does the wetland meet all of the following critoria of a wetland in a coastal lagoon? The wetland fines in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbarks, gravel banks, siningle, or, less frequently, rocks — The lagoon in which the wetland is located contains ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at loast a portion of the lagoon free wedgebug measured near the bottom) of Vice = Grave CK S.1 (No.8 lacks worthand in a nowest linear	- Gert-
t all of the following three conditions? Alvely undigurbed (has no diking, ditching, fil aggressive, opportunistic plant species (see il ndward edge of the wetland has a 100 ft buff	 = 1
mowed grassland. — The wetland is larger than $^1/_{10}$ ac (4350 ft.) Yes# Category 1 No = Category 1	
SC 6.0. Interdunal Westands Is the westend west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUD)? If Is proactical terms that means the following geographic areas: In practical terms that means the following geographic areas: In practical terms that means the following geographic areas: In one Booch Peninului Lands west of SR 130 Grayland-Westport: Lands west of SR 115 and SR 109 Occan Shores-Copalie: Lands west of SR 115 and SR 109 Ves ~ Go to SC 6.1 No phot an interdunal westland for rating	Oat 1
SC 6.1. is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H.H.H or H.H.M for three appear) No = Chaegory No = Co to SC 6.2 is the wetland 1 ac or larger or is it in a mosale of wetlands that is 1 ac or larger or larger or is it in a mosale of wetlands that is 1 ac or larger.	= t:
Yes = Category II No $-$ Go to $SC6.3$ is the unit between 0.1 and 1 as, or is it in a mosals of wetlands that is between 0.1 and 1 as? $Yes = Category III$ No $*$ Category IV	gt gt Et s
Catogory of wetand based on Spedial Characteristics if you answered No for all types, enter "Not Applicable" on Summary Form	14年

Wetland name or number

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RATING SUMMARY – Western Washington

- B Date of site visit; 5 4 22	cology	Wetland has multiple HGM classes? Y N
Name of wetland (or ID #): Lings / 100	Rated by E Milly L. Hansen Ti	HGM Class used for rating

NOTE: Form is not complete without the figures requested (figures can be combined). Source of base aerial photo/map

OVERALL WETLAND CATEGORY (based on functions or special characteristics)

1. Category of wetland based on FUNCTIONS

Category 1 – Total score = 23 - 27 ___Category III - Total score = 16 - 19 ∠Category II – Total score = 20 - 22 Category IV - Total score = 9 - 15

Score for each function based on three cartings (order of ratings is not important)

FUNCTION	Improving Water Quality	Hydrologic	Habitat	1.115
	9	Cycle the appropriate	propriate ratings	
Site Potential	7(W) H	٦ (M) н	ΤЭм н	
andscape Potential	<u>∓</u>	(T) W H		
Value	ب ×) 1 (M) H	н) м г	TOTAL
Score Based on Ratings	S	W	Ŋ	9/

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	п п
Wetland of High Conservation Value	I
Bog	1
Mature Forest	I
Old Growth Forest	ı
Coastal Lagoon	п п
Interdunal	ишии
None of the above	12

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Wetland name or number__

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Wab of the second secon	To answer questions:	Figure #
Cowardin plant classes	D1.3, H1.1, H1.4	
Hydroperlods	D1.4, H1.2	
Location of outlet (can be added to map of hydroperiods)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (can be added to another figure) 0 2.2, D 5.2	D 2.2, D 5.2	
Map of the contributing basin	D4.3, D 5.3	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H21, H22, H23	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website) 0.3.1, D.3.2	D3.1, D3.2	
Serven capture of 11st of TMDLs for WRIA in which unit is found (from web)	D3.3	

Riverine Wetlands

	the state of the state of	
Mab of:	To answer questions:	Figure #
Cowardin plant classes	H11, H1.4	
Hydroporlods	H1,2	
Ponded depressions	RII	
Boundary of area within 150 ft of the wetland (can be added to another floure)	R24	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (can be added to another figure)	R4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygan: Area that extends 1 km from entire wetland adga - Including	H 2,1, H 2,2, H 2,3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R3.1	
Scroon capture of list of TMDLs for WRIA in which unit is found (from web)	R3.2, R3.3	

Lake Fringe Wetlands

9 # H,H,H 8 # H,H,H 7 # H,H,L 7 # H,M,L 6 # H,M,L 5 # M,L,L 4 # M,L,L 3 # L,L,L

X8 0.	To answer questions: Figure #	Figure #
Cowardin plant classes	L1.1, L4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaccous plants	11.2	
Boundary of area within 150 ft of the wetland (can be added to another figure) L 2.2	1.2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website) L3.1, L3.2	L3.1, L3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	13.3	

Slope Wetlands

Map of	To answer questions: Fig	Floure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperlods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	51.3	
Plant covor of dense, rigid trees, shrubs, and herbaceous plants	\$4.1	
Boundary of 150 ft buffer (can be added to another figure)	521,55.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H23, H2.2, H2.3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	53.1, 53.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	53.3	

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HGM Classification of Wetlands in Western Washington

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in For questions 1-7, the criteria described must apply to the entire unit being rated. questions 1-7 apply, and go to Question 8,

Are the water levels in the entire unit usually controlled by tides except during floods?

YES - the wetland class is Tidal Fringe - go to 1.1 NON- go to 2

(1.1 lx/he salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

lfyour wetland can be classified as a Freshwater Tidal Fringe use the forms for Riverine wetlands. If it is Saltwater Tidal Fringe it is an Estuarine wetland and is not scored. This method cannot be used to YES - Freshwater Tidal Fringe NO - Saltwater Tidal Fringe (Estuarine) score functions for estuarine wetlands. The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit,

NO × go to 3

YES - The wetland class is Flats if your wetland can be classified as a Flats wetland, use the form for Depressional wetlands.

3. Does the entire wetland unit meet all of the following criteria?

....The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac. (8 ha) in size; tleast 30% of the open water area is deeper than 6.6 ft (2 m).

NO } go to 4

YES - The wetland class is Lake Fringe (Lacustrine Fringe)

Does the entire wetland unit meet all of the following criteria?

_The wetland is on a slope (slope can be very gradual), _The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks,

he water leaves the wetland without being impounded.

NO - go to 5

YES - The wetland class is Slope

shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft NOTE. Surface water does not pond in these type of wetlands except occasionally in very small and

Does the entire wetland unit meet all of the following criteria?

ທ່

____The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,

The overbank flooding occurs at least once every 2 years.

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m

Wetland name or number

NO Ago to 6 NOTE: The Riverine unit can contain depressions that are filled with water when the river is not Rooding

surface, at some time during the year? This means that any outlet, if present, is higher than the interior 6. Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the of the wetland.

NO - go to 7

YES -) The wettand class is Depressional

maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural Is the entire wetland unit located in a very flat areafwith no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be

NO - go to 8

YES - The wettand class is Depressional

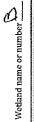
classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the Your werland unit seems to be difficult to classify and probably contains several different HGM wetland unit being scored.

NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit, classify the wetland using the class that represents more than 90% of the total area,

HGM class to use in rating	Riverine	Depressional	Lake Fringe	Depressional	Consequen	Riverine	Treat as	ESTUARINE
HGM classes within the wetland unit being rated	Slope + Riverine	Slope + Depressional	Slope + Lake Fringe	Depressional + Riverine along stream	Within Boundary of depression Depressional + Lake Frings	Riverine + Lake Fringe	Salt Water Tidal Fringe and any other	class of freshwater wetland

lfyou are still unable to determine which of the above criteria apply to your westand, or ifyou have more than 2 HGM classes within a wetland boundary, classify the wetland as Depressional for the

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S J Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points # 1. D.12. The spil 2 in below the surface for duff layer is true day or true organic (use NNCS definitions)/vs=# 4. No (0) Wedand has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. Points (2) Wedand has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 1 Wedand is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing citch. Points = 1 points (4) D.1.4. INTO CONTRICT AND CONTRI Add the points in the boxes above Water Quality Functions - Indicators that the site functions to improve water quality D 1.1. Characteristics of surface water outflows from the weetland: Weetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). **DEPRESSIONAL AND FLATS WETLANDS** This is the area that is ponded for at least 2 months. See description in manual. D 1.0. Does the site have the potential to improve water quality? Area seasonally ponded is > % total area of wetland Area seasonally ponded is > % total area of wetland Area seasonally ponded is < % total area of wetland D 1.4. Characteristics of sensonal pending or inundations Total for D 1

Record the rating on the first page Rating of Site Potential If score is: 12-16 = H 1/6-11 = M ___0-5 = L

D 2.2. to 5 10% of the area within 150 ft of the wetland in land uses that generate pollutants? Yes = 1 No 40 CD 2.3. Are there septic systems within 250 ft of the wetland? Yes = 1 No 40 CD 2.3. Are there septic systems within 250 ft of the wetland? Yes = 1 No 40 CD 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1-0 2.3? Source Yes = 1 No 40 CD 2.	D 2.0. Does the landscape have the potential to support the water quality function of the site?	e?	Selection (Selection)
% of the area within 150 ft of the wedand in land uses that generate pollutants? re septic systems within 250 ft of the wedand? are other sources of pollutants coming into the wedand that are not listed in questions Adgithe points in i		Yes # 1 No w(0)	٥
ire septic systems within 250 ft of the wetland? are other sources of pollutants coming into the wetland that are not		Yes≝1 No a(Q)	0
ere other sources of pollutants coming into the wetland that are not		Yes = 1 No 40	ຄ
	D.2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D Source.	02.1-02.3?	0
		o boxes above	٥

Rating of Landscape Potential If score is: 3 or 4 = H 1 or 2 = M $\sqrt{0}$ = L Record the rating on the first page

D 3.0. Is the water quality improvement provided by the site valuable to society?	3546670
D 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(4) list?	0
03.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list?	-
D 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality fanswer YES if there is a TMDL for the basin in which the unit is found?	N
Tor D 3	ď
Rating of Value If score is 1.2.4 = H 1 = M 0 = L Record the rating on the first page)

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Wetland name or number

N 0 Ś Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation Characteristics of surface water opuses a new contraction of the outlet) points = 4 Votand is a depression of this depression with no surface water leaving it (no outlet) Wetland has an intermittently flowing stream or late,) whose outlet is a permanently flowing outletohorty 2. Wetland has a flat depression (Quiezno) 7 or key), whose outlet is a permanently flowing gitch points = 1. D 4.2. <u>Dooth of storage during wet periods:</u> Exfimetre the holght of ponding above the bottom of the audict. For westands with no audict, measure from the surface of permanent withs no all the deepest part. Marks of ponding are 3 for more above the zurface or bottom of outlet Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet points = 7 points = 3 points = 5 points = 3 points = 3 points = 1 Contribution of the westland to storage in the waturating! Estimate the ratio of the area of upstream basin are are westland surface water to the westland to the westland unit itself. The area of the basin is less than 10 times the area of the unit. The area of the basin is 100 to 100 times the area of the unit points. The area of the basin is more than 100 times the area of the unit points. Entire westland is in the Eiths class. DEPRESSIONAL AND FLATS WETLANDS D 4.0. Does the site have the potential to reduce flooding and erosion? Wetland is flat but has small depressions on the surface that trap water Marks of ponding less than 0.5 ft (6 in) Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet D 4.1. Characteristics of surface water outflows from the wetlands The wetland is a "headwater" wetland 04.3

2 2 2 100	bovo L	Record the rating on the first page	×	وا
	Add the points in the boxes above	Record the ra	O 5.0. Does the landscape have the potential to support hydrologic functions of the site?	Yes # 1 No Cad
		1=M0.5 = L	ort hydrologic fur	
	_	12-16=H VG1	potential to supp	rater discharges?
		If score is:	cape have the	d receive stormw
	Total for D 4	Rating of Site Potential If score is: 12-16 = H V6-11 = M O-5 = L	D 5,0, Does the lands	D 5.1. Does the wedand receive stormwater discharges?

0

	first page	Record the rating on the first page	120	H 1or2 M	fscore is: 3=	Rating of Landscape Potential If score is: 3 = H lor 2 = M / 0 = 1
	٥	Add the points in the boxes above				Total for D S
	0	 Σ. S. I. FINO V. Unit Contributing basin of the working covered with intensive numbring take (respectfull at 2.5 residence/3c, urban, commercial, agriculture, etc.)? 	פס אנונון	or ore wedang cover (ture, etc.)?	mendal, agricu	>1 residence/ac, urban, commercial, agriculture, etc.)?
_	છ	D.S.2. is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? Yes = 1 No.Cg.	ıt genera	tland in land uses tha	150 ft of the we	D 5.2. Is >10% of the area within

9000000	مبدي	۵
	thos conditions around c.condition is met where flooding has points = ? points = 1 points = 1 conditions that the points = 0 points = 0	al flood control plan?
D 6.0. Are the hydrologic functions provided by the site valuable to society?	D 6.1. The unit is in a handscape, that has flooding problems. Choose the description that beet matches conditions around the webbnd unit being rated. Do not odd points. <u>Choose the historest seer if more than one conditions in methods when we webbnd units histored.</u> The wethand captures surface water that would otherwise flow down-gradient into areas where flooding has damaged human or natural recourses (leg., houses or salmon redds): • Flooding occurs in a sub-basin that is immediately down-gradient. points = ∑ • Surface flooding problems are in a sub-basin that is immediately down-gradient. points = ∑ Flooding from groundwater is an issue in the sub-basin. The existing or potential outflow from the welland is so constrained by human or natural conditions that the water stored by the wetland cannot reach areas that flood. Explain why points = 0 There are no problems with flooding downstream of the weetland.	0.6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? Ves = 2 Nose 0

Rating of Value if score is: 2-4 = H V 1 = M 0 = 1

Total for D 6

Record the rating on the first page

Add the points in the boxes above

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rea of surface depressions within the Riverine wetland that can trap sediments during a flooding eve repressions cover 3% area of wetland prepressions cover 3% area of wetland prepressions cover 3% area of wetland propersions present but cover < % area of wetland propersions present but cover < % area of wetland propersions present present	
	끂
	points = 8
	points = 4
	points = 2
	points # 0
with >90% cover at person height, not Cowardin classes)	1
	points = 8
	points = 6
of the wetland	points = 6
	polnty 3
wetland	points = 0
Total for R1 Add the points in the boxes above	
Rading of Site Potential If score is: 12-16 = H 6-11 = M 6-5 = L Reford the	Speard the rating on the first page
R 2.0. Does the landscape have the potential to support the water quality function of the site?	
R.2.1. is the wetland within an incorporated city or within its UGA?	Yes=2 No=0
R 2.2. Does the contributing basin to the wedand include a UGA or incorporated affect? Yes ≠ 1	Yes#1 No#0
R 2.3. Does at least 10% of the contributing basin contain tilled fields, partupes, or forests that have been clearent within the last 5 years? Yes = 1 No =	oon cloarcut Yes = 1 No = 0
R 2.4. is > 10% of the area within 150 ft of the wedand in land uses phat generate pollutants? Yes = 1	Yes=1 No=0
R 2.5. Are there other sources of pollutants coming into the weakind that are not listed in questions R 2.1. R 2.4. Other sources	(2,1-R2,4 Yes = 1 No = 0
Total for R.2 Add the points in the baxes above	above
Rating of Landscape Potential If score is: 3-6 vA 1 or 2 m M 0 a L Record the	Record the rating on the first page
R 3.0. is the water quality improvement/frovided by the site valuable to society?	
R 3.1. Is the wedand along a stream of Mer that is on the 303(d) list or on a tributary that drains to one within 1 mi?	ո 1 ուն
Yes = 1	No = 0
R 3.2. Is the wetland along a stream or river that has TMDL limits for nutrients, toxics, or pathogens?	
Yes # 1	Yes = 1 No = 0
R 3.3. Has the site peen identified in a watershool or local plan as important for maintaining water quality? (<i>answer</i> YES if there's a 1900, for the drainene in which the unit is formed	ality? (answer
Add the points in t	o.oqe

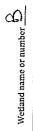
Wetland name or number

Hydrologic Functions — Indicators that site functions to reduce flooding and stream erosion R.4.0. Does the site have the potential to reduce flooding and erosion?	eam erosion
R.4.1. Characteristics of the overbank storage the wetland provides: Estimate the overage wielth of the wetland perpondicular to the direction of the flow and the width of the section or river channel (distance between banks). Calculate the ratio: (overage width of wetland)/[overage width of section between banks).	if the average
If the ratio is more than 20	points = 9
If the ratio is 10-20	points = 6
If the ratio is 5-<10	points = 4
If the ratio is 1~5	points = 2
If the ratio is < 1	points # 1
R.4.2. Characteristics of plants that slow down water velocities during floods: Treat large woody debnis as forest on simb. Choose the points appropriate for the best description (polypops need to have 200% cover at person helph. These are NOT Convergin larsses).	forest or person
Forest or shrub for > 1/3 area OR emorgent plants > 2/3 area	points = 7
Forest or shrub for > 1/10 area OR emergent plants > 1/1 apea	points = 4
Plants do not meet above criteria	points = 0
Total for R 4 Add the points in the boxes above	es above
Rating of Site Potential If score Et. 12-46 w H6-11 = M6-5 = 1.	Record the rating on the first page
R 5.0. Does the landscape have the potential to support the hydrologic functions of the site?	
R 5.1. Is the stream or river adjacent to the wotland downout?	O No # 1
R 5.2. Dats the up-gradient watershed include a UGA or incorporated area?	Yesell Now0
R 5.3. Is the up-gradient stream or rivor controlled by dams?	Yes# 0 No#1
Total for RS Add the points in the boxes above	es abovo
Rating of Landscape Potential if scoro is: 3 = H 1 or 2 = M D = L Record	Record the rating on the first page
R 6.0. Are the hydrologic functions provided by the site valuable to society?	
R.S.1. Distance to the nearest areas downstream that have flooding problems? Choose the description that best fits the site. The sub-bash immediately down-gradient of the wetland has flooding problems that result in damage to	geto
human or natural resolutores (e.g., houses or salmon redds) Surface flooding problems are in a sub-basin farther down-gradient No flooding problems anywhere downstream	points = 2 points = 1 points = 0
R.6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? Yes = 2. No = 0	ood control plan? Yes = 2 No = 0
Total for B 6	

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HABITAT FUNCTION	Inese questions apply to wetlands of all Holy dasses. HABITAT FUNCTIONS : Indicators that site functions to provide important habitat	Inese questions apply to wetlands of all HGM classes. cators that site functions to provide important habitat	or all HGM classes. Important habitat	
H 1.0, Does the site h	H 1.0. Does the site have the potential to provide habitat?	vide habitat?	Province and the second state of the second st	of property of the property of
H 1.1. Structure of plan Cowards plant of Structure of Tare to Structure Structure Structure Forested (at mit h If the unit h The constend The Forested The Forested The Forested	staire of plant community; indicators are Cowardin cl and plant classes in the wetland. Up to 210 patches, to or more than 10% of the unit if it is smaller than 2 Aquatic bed Emergent Serub-Anto (areas where shrubs have > 30% cover) forcestel (areas where trees have > 30% cover) if the unit has a foot and class, check if; The forested class have a 3 out of 5 strata (canopy, sub that each cover 20% within the forested polygon	e Cowardin clusses and set to 12 partnes may be comb amaller than 2.5 ac. Add th > 30% cover} % cover} # # # # # # # # # # # # #	H 1.1. Structure of plant community: Indicators are Cowardin classes and strata within the Forested class. Chock the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to make the ethershold of 5 or or more than 10% of the unit if it is smaller than 2.5 or. Add the number of structures checked. ——Aquatic bed ——Aquatic bed ——Aquatic bed ——Attuctures or more points = 4 ——Structures or more points = 2 ——Structures or more points = 2 ——Structures points = 2 ——Structures points = 2 ——Structures points = 1 ——Forested class, whose shrubs have > 30% cover) ——The numb has a Porested class, check if: ——The numb class has 3 and to 5 strain (among value), shrubs, herbacoous, moss/ground-cover) ——The Forested class has 3 and to 5 strain (among value) and cover 20% within the Forested polygon ——The Forested class has 3 one to 5 strain (among value).	0
H 1.2. Hydroperiods Check the types of water innor than 10% of the were permanently flooded Cocasionally flooded of Cocasionally flooded of Cocasionally flooded of Cocasionally flooding at Seatonally flowing at Seatonally flowing at Lake Fringe wetland Freshwater tidal wet	Hydropariods Wheek the types of water regimes (hydroporlods) present within the wetland. The water remore than 12% of the wetland or % at to count (see text for descriptions of hydroperiods). Bethanouthy flooded or inundated Seasonally flooded or inundated Seasonally flooded or inundated Seasonally flooded or inundated Seasonally flooded are not hore in, or adjacent to, the wetland Lake frings wetland Freshwater tidal wetland Freshwater tidal wetland	iods) present within the w unt (see text for description , or adjacent to, the wedan nt to, the wetland	Hydropariods: Check the types of water regimes (hydroportods) present within the wetland. The water regime has to cover more than 10% of the wetland or is ac to count (see text for descriptions of hydroperiods). Bethanoutly flooded or inundated Seasonally flowing stream or hiver in, or adjacent to, the wetland Lake frings wetland Lake frings wetland Z points 2 points 2 points 2 points	
H 1.3. Richnoss of plant: species Count the number of plant: Different parches of the san the species. Do not include if you counted: >15 species < 5 -19 species < 5 species	Richness of plant species Count the unber of plant spocles in the wetland that cover at least 10 ft? Outh the unber of plant species can be combined to meet the site thin the species. Do not include Eurasian miljoit, reed conarygrass, purple loo if you counted: > 15 species < 5 species < 5 species	rtiand that cover at loast 1 s combined to meet the siz il, reed conorygrass, purp	Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft? Count he number of plant species can be combined to meet the size threshold and you do not have to name this species. Do not include Eurasian miltoli, reed anarygrass, purple loosestrife, Conadian thistie points = 2 species. 13 species points = 7 species plants = 2 species	٥
H 1.4. Interspection of habitats Deedde from the observant the dasses and unvergets how four or more plant. None 60 points All three diagrams In this row are HIGH = 3 points	interspersion of habitats Decide from the objects and appearance of mudifiars is high, moderate for the classes and unwagestate dress (can include open water or mudifiars) is high, moderate how four or more plant classes or three classes and appearance, the rating is always high, how four or more plant classes or three classes and appearance, the rating is always high. **About the classes of three classes and appearance in the point and properties are properties and appearance in the classes and appearance in	transparsion among Cowar do open water or mudital do open water, the research open water, the repoint	threspecial of habitats Dodde from the digrams below whether interspersion among Cowardin plants classes (described in H.1.1), or the dasses and unvegetated areas (can include open water or muchiats) is high, moderate, low, or none. If you have four or more plant classes or three classes and open water, the roting is always high. Noderate = 2 points The following the points The described in H.1.1, or none if you are the classes and open water, the roting is always high. The dasses are more plant classes or three classes and open water, the roting is always high. The dasses are more plant classes or three classes and open water, the roting is always high. The dasses are more plant classes or three classes and open water, the roting is always high. The dasses are more plant classes or three classes and open water, the roting is always high. The dasses are more plant classes or three classes and open water, the roting is always high. The dasses are more plant classes or three classes and open water, the roting is always high. The dasses are more plant classes or three classes and open water, the roting is always high. The dasses are more plant classes are dasses and open water, the roting is always high. The dasses are more plant classes are dasses and open water, the roting is always high. The dasses are more plant classes are dasses and open water, the roting is always high.	0

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Wetland name or number

H 15. Special habitat features: Greek the habitations that are present in the wetland. The number of theeks is the number of points. Greek the habitations woold debrie within the wetland (> 4 in diameter and 6 ft long). Standing snags (dah > 4 in) within the wetland (> 4 in diameter and 6 ft long). Standing snags (dah > 4 in) within the wetland Underout banks are present for at least 6.6 ft (2 in) and/or overhanging plants extends at least 3.3 ft (1 in) Stable stoop ability of the material that might be used by beaver or muskraf for denning (> 30 degree slope) OR signs of recent beaver activity are present (cut shrubs or trees that have not yet weathered where woold is exposed) Aleast as of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally in-indated (structures for cgg-loying by amphibiens) Linnials plants cover less than 25% of the wetland area in every stratum of plants (see H 11 for list of strate)	
Total for H 1	7
Rating of Site Potential if score is:15-18= H	he first pag
H 21. Accessible habitat (include only habitar ther directly abuts weeland unit). U Q M T F Goleafate: So undisturbed habitat — + [(% moderate and low intensity land uses)/2] = 6 % Y total accessible habitat is: > 1/3 (33.3%) of 1 km Polygon 10-13% of 1 km Polygon 10-13% of 1 km Polygon 10-13% of 1 km Polygon	_
H 2.2. Undicatured habitar in 1 km Polygon around tho wetland. **Colculation: % undistructed habitar + 1 (% moderate and low intensity land uses)/21 = 1	garane.
od OS	5
4-6 = H _ 1-3 = M { < 1 = L	e first page
s valuable to society?	
H 3.1. Does the site provide habitat for species valued in laws, regulations, or politics? Choose only the highest score that applies to the wedand being rated. Site meets ANY of the following criteria:	
It has 3 or more priority habitats within 100 m (see next page) It provides habitat for Threatened or Endangered species (any plant or animal on the state or fodoral lists) It is mapped as a location for an individual WDPV priority species It is a Wetland of High Conservation Value as determined by the Department of Natural Resources It has been or reproved.	\sim
- It was been audegoized as an Important habitar site in a local or regional comprehensivo plan, in a Shoreline Master Plan, or in a watershed plan. Site has 1 or 2 priority habitars (listed on next page) within 100 m Site does not meet any of the categia above. Site does not meet any of the categia above.	
O*L Record	he first pag
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WDFW Priority Habitats

Category

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland name or number

Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria ore met

Does the wetland meet the following criteria for Estuarine wetlands?

SC 1.0. Estuarine wetlands

Wetland Type

--- The dominant water regime is tidal, With a salinity greater than 0.5 ppt

Vegetated, and

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No - Go to SC 1.2

Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151?

SC 1.1. Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area

Yes -Go to SC 1.1 No Not an estuarine wetland

ä

Priority habitars listed by WDFW (see complete descriptions of WDFW priority habitats, and the countries in which they can be found in Washington Department of Fish and Whalfing, 2006 Priority habitar and Special List Olympia, Washington, 177 pp. http://walitwan.gov/publications/clofings/publications/clofin http://wdfw.wa.gov/conscrvation/phs/list/

Counthow many of the following priority habitants are within 330 (f. (100 m) of the wedand unit. NOTE: This question is independent of the land use between the weiland unit and the priority habitat.

- Aspen Stands: Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- Blodiversity Areas and Corridors: Areas of habitat that are relatively important to various species of native fish and wildlife (full descriptions in WDFW PHS report).
- Herbaccous Baids: Variable size patches of grass and forbs on shallow solls over bedrock.
- Old-growth/Mature forests: Old-ground west of Cascade great Sands of at least 2 tree species, forming a multi-sprend canopy with occasional small openings; with at feast Brees/e (20 trees/h.b.) 32. In [61 cm] bith or > 250 by years of age, Mature forests Stands with average dameters exceeding 2.1 in [52 cm] dibt; grown cover may be less than 100%, decay, decadence, numbors of sangs, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.
- Oregon White Oak: Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak "Component is important (full descriptions in WDFW PHS report p. 158 see web link above).
- Riparian: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.
- Westside Prairies: Horbacoaus, non-forested plant communities that can either take the form of a dry prairie or a wet
 prairie (fuil descriptions in WDPW PHS report p. 161 see web link above).
- Instream: The combination of physical, biological, and chemical processes and conditions that interact to provide (unctional life history requirements for instream fish and wildlife resources.
- Nearshore: Raiativaly undisturbed nearshoro habitats. These includo Coastal Nearshoro, Open Coast Nearshoro, and Pugot Sound Nearshoro. [full descriptions of habitats and the definition of relatively undisturbed are in WDFW report see web link on previous page).
- Caves: A naturally occurring cavity, rocess, void, or systom of interconnected passages under the earth in soils, rock, ico, or other geological formations and is large enough to contain a human.
- Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation
- 73 lust. Homogenous areas of rock rubble ranging in average size 0.5 6.5 ft (0.15 2.0 m), composed of basait, andesita, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.
 - Stags and Logs: Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 ft [2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed

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5 SC 2.0. Wetlands of High Consorvation Value (WHCV)
SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Asolands of High
Conservation Value?
SC 2.2. is the wetland listed on the WDNR database as a Wetland of High Conservation Value?

(No 3 G 2.2. is the wetland listed on the WDNR database as a Wetland of High Conservation Value?

No = Not a WHCV Yes # Category I

— The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.

— At least ½ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-— The wotland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less

mowed grassland.

than 10% cover of non-native plant species. (If non-native species are Spartina, see page 25)

SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?

SC 2.3. is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdosk/datassarch/wnhpwetlands.pdf

(No Not a WHCV Yes a Category 1 No a Not a WHC. SC 2.4. Has WDNR identified the wetland within the \$/T/R as a Wetland of High Conservation Value and listed it on Yes - Contact WNHP/WDNR and go to \$C2,4 their website?

SC 3.0. Bogs

Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? Use the key below, if you answer YES you will still need to rate the wetland based on its functions. SC3.1. Does an area within the westland unit have organic soil horizons, either posts or mucks, that compose 16 in or more of the first 32 in of the soil profile?

Vez -60 to SC3.3 No -60 to SC3.2

over bodrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or No = Is not a bog SC 3.2. Does an area within the wetland unit have organic soils, either peats or mucks, that are less than 16 in deep SC3.3. Does an area with poats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% Yes - Go to \$C 3.3

NOTE: If you are uncartain about the extent of mosses in the understory, you may substitute that criterion by measuring the pH is iess than 5.0 and the measuring the pH is iess than 5.0 and the Yes - Is a Category I bog No - Go to SC 3.4 cover of plant species listed in Table 4?

-3

western hemiook, lodgepole plice, quaking aspen, Engelmann spruce, or western white plice, AND any of the special probles liked in Table 4 provides more than 30% of the cover undiget the enanopy? Special probles in the plice $T_{\rm CO}$ and T_{\rm plant species in Table 4 are present, the wetland is a bog. SC 3.4. is an area with poats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, western red cedar,

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SC 4.0. Forested Wedands Does the wethand have at least 1.conflanous.age of forest that meets one of these criteria for the WA Does the wethand have at least 1.conflanous.age of forest that meets one of these criteria for the WA Department of Flan and Wildlife's forests as priority habitat? If you answer YES you will still need to rate the wethand based on its luncions. — Old-growth forests (went of Cascado creat). Stands of at least two tree species, forming a multi-layered canopy with excasional amall openings; with at least 8 trees/se (20 trees/ha) that are at least 200 years of age OR have a diameter at broast helging (field) of 32 h or more. — Mature forests (west of the Cascado Creat); Stands where the largest trees are 80-200 years old OR the species that make up the canopy have an average diameter (dbt) exceeding 2.1 in (53 cm). Yes a Catagory No year of the species of the canopy have an average diameter (dbt) exceeding 2.1 in (53 cm).	- ±
SC S.O. Wetlands in Coastal Lagoons Does the working meet all of the following criteria of a working in a coastal lagoon? Does the working meet all of the following criteria of a working in so coastal lagoon? — The working line at depression adjacent to manine waters that is wholly or partially separated from marine working in a depart as porturalist ponded water that is calline or bracklar 0.5 ppt — The lagoon in which the wethind is located containing sponded water that is calline or bracklar 0.5 ppt during most of the vyeal or all start a porturalist ponder water that is calline or bracklar 0.5 ppt during most of the vyeal or all start a porture of the lagoon (needs to be measured near the bottom) SC S.L. Does the wethand meet all of the following three conditions? — The working a suggressive, opportunistic plant species (see list of species on p. 100). — At loast & of the landward odge of the wethand has a 100 ft buffer of shrub; forest, or un-grazed or un-moved grazialard. — The wetland is larger than 1/10 ac (4350 ft²). Yes = Category! No = Category! No = Category!	Gr. 11
Is the wetched wetsined. Is the wetched wetsined to 1899 line (also called the Western Boundary of Upland Ownership or WBUD)? If you answer yes you will still need to rate the wetsined based on its habitat functions. In practical terms that means the following geographic areas: — Long Boach Peninsular Lands west of SR 109 — Grayland-Westport: Lands west of SR 109 — Occan Shoros-Copalis: Lands west of SR 109 Nos – Go to SC 6.1 / No a pot an interdunal wetland for rating.	ă
SC 6.1. Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H,H,H or H,H,M for the three aspects of function)? SC 6.2. Is the wetland 1 ac or larger, or Is it in a mosale of wetlands that is 1 ac or larger,	5 5 7
SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a mozale of wedands that is between 0.1 and 1 ac? $Vos = Category \ II \qquad Vos = Category \ II \ Vos $	Cat. 111
Category of wetland based on Special Characteristics If you answered No for all types, enter "Not Applicable" on Summary Form	3

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Wetland Rating System for Western WA: 2014 Update Rating Form – Effective January 1, 2015

RATING SUMMARY – Western Washington

12 H 22	And Trained by Ecology? Yes No Date of training 2005	Wetland has multiple HGM classes? YN
Name of wetland (or ID#):	Rated by Envilly L. Him	HGM Class used for rating

NOTE: Form is not complete without the figures requested (figures can be combined).

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	or special characteristics_
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2	OVERALL WETLAND CATEGORY
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1. Category of wetland based on FUNCTIONS

Category !-- Total score = 23 - 27 Category III - Total score = 16 - 19 ∠Category II - Total score = 20 - 22 _Category IV - Total score = 9 - 15

FUNCTION	_ ¥	000	ing yiller	X	ydrologi	100	Ï	Habitat		
	ł				Circle the appropriate	appr	opria	te roth	8/	
Site Potential		Σ		Ξ		7	_	ĘZ ∑	b	
Landscape Potential	=(Σ	b	Ŧ	∑(≥(5	$ _{\pm i}$	IJ S	7	
Value	Ξ	Σ	_	I	3		占	Σ	_	TOTAL
Score Based on Ratings	_	4			V		יע		_	4

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	и и
Wetland of High Conservation Value	I
Я́ов	1
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	и 1
Interdunal	va m n i
None of the above	7

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Score for each function based on three rathins (order of ratings is not important)

		CATEGORY
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Screen Capture on instantion WA: 2014 Update
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Wetland name or number __

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

tap of:	To answer questions: Figure #	nre #
owardin plant classes	D1.3, H1.1, H1.4	
ydroperiods	D1.4, H1.2	
ocation of outlet (can be added to map of hydroperiods)	D 1.1, D 4.1	
oundary of area within 150 ft of the wetland (can be added to another figure) D 2.2, D 5.2	D 2.2, D 5.2	
dap of the contributing basin	04.3, 05.3	
km Polygon: Area that extends 1 km from entire wetland edge - Including	H 2.1, H 2.2, H 2.3	
olygons for accessible habitat and undisturbed habitat		
creen capture of map of 303(d) listed waters in basin (from Ecology website) D 3.1, D 3.2	D3,1, D3,2	
creen capture of list of TMDIs for WRIA in which upit is found (from web)	023	

Riverine Westlands

ap of:	To answer questions:	Figure #
swardin plant classes	H 1.1, H 1.4	
droperlods	H 1.2	
anded depressions	81.1	
bundary of area within 150 ft of the wetland (can be added to another figure)	R 2.4	
ant cover of trees, shrubs, and herbaccous plants	R 1.2, R 4.2	
ldth of unit vs. width of stream (can be added to another figure)	84.1	
ap of the contributing basin	R 2.2, R 2.3, R 5.2	
km Polygon: Area that extends 1 km from entire wetland edge - including	H21, H22, H23	
slygons for accessible habitat and undisturbed habitat		
reen capture of map of 303(d) listed waters in basin (from Ecology website)	R3.1	
reen capture of list of TMDLs for WRIA in which unit is found (from web)	R3.2, R3.3	

Lake Fringe Wetlands

ap of	To answer questions:	Figure #
wardin plant classes	L1.1, L4.1, H 1.3, H 1.4	
ant cover of trees, shrubs, and herbaceous plants	1.1.2	
oundary of area within 150 ft of the wedand (can be added to another figure)	122	
km Polygan: Area that oxtends 1 km from entire wetland edge - including	H21, H22, H23	
slygons for accessible habitat and undisturbed habitat		
reen capture of map of 303(d) listed waters in basin (from Ecology website) L3.1, L3.2	L3.1, L3.2	
reen capture of list of TMDLs for WRIA in which unit is found (from web)	13,3	

Мар ot	To answer questions:	Figure #
Cowardin plant classes	H11, H1.4	
Hydroperlods	H1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	513	_
Plant cover of dense, rigid trees, shrubs, and herbaceous plants	54.1	
(can be added to figure above)		
Boundary of 150 ft buffer (can be added to another figure)	\$ 2.1, \$ 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - Including	H21, H2,2, H2,3	
polygons for accessible habitat and undisturbed habitat	•	
Scroon capture of map of 303(d) listed waters in basin (from Ecology website)	53.1, 53.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	53.3	

HGM Classification of Wetlands in Western Washington

For questions 1-7, the criteria described must apply to the entire unit being rated

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1-7 apply, and go to Question 8.

Are the water levels in the entire unit usually controlled by tides except during floods?

50 to 2 $\gamma_{\rm ox}$

YES - the wetland class is Tidal Fringe - go to 1.1

1.11s the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

NO - Saltwater Tidal Fringe (Estuarine)

If your wetland can be classified as a Freshwater Tidal Fringe use the forms for Riverine wetlands. If it is Saltwater Tidal Fringe it is an Estuarine wetland and is not scored. This method cannot be used to YES - Freshwater Tidal Fringe score functions for estuarine wetlands.

The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit.

NO/20 to 3

YES - The wetland class is Flats fyour wetland can be classified as a Flats wetland, use the form for Depressional wetlands

3. Does the entire wetland unit meet all of the following criteria?

The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size,

At least 30% of the open water area is deeper than 6.6 ft (2 m).

Does the entire wetland unit meet all of the following criteria?

NQ/- go to 4

YES - The wetland class is Lake Fringe (Lacustrine Fringe)

__The wetiand is on a slope (slope can be very gradual), __The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks,

The water leaves the wetland without being impounded.

NO - go to 5

NOTE: Surface water does not pond in these type of wetlands except occasionally in very small and shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft deep).

YES - The wetland class is Slope

5. Does the entire wetland unit meet all of the following criteria?

The unit is in a valley, or stream channel, where It gets inundated by overbank flooding from that

The overbank flooding occurs at least once every 2 years.

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w

Wetland name or number,

NO – go to 6

WES – The wetland class is Riverine — WOTE: The Wiverine unit can contain depressions that are filled with water when the river is not flooding

surface, at some time during the year? This means that any outiet, if present, is higher than the interior Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the of the wetland.

NO - go to 7

YES - The wettand class is Depressional

maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural Is the entire wetland unit located in a very flat area with no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be

NO - go to 8

YES - The wetland class is Depressional

classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stroom within a Depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT WHERAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the Your wetland unit seems to be difficult to classify and probably contains several different HGM wetland unit being scored.

NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wedand unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit, classify the wedand using the class that represents more than 90% of the total area.

HGM classes within the wetland unit being rated	HGM class to use in rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake Fringe	Lake Fringe
Depressional + Riverine along stream	Depressional
within boundary of depression	
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Saft Water Tidal Fringe and any other	Treat as
class of freshwater wetland	ESTUARINE

lf you are still unable to determine which of the above criteria apply to your wetland, or if you have **move than 2 HGM classes** within a wetland boundary, classify the wetland as Depressional for the rating.

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M 0 M T Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 1 Wetland is a flat depression (QUESTION 7 on keyl, whose outlet is a permanently flowing diskn. points = 1 D1.2. This soil 2.1h below this surface (Lettif layer) is true clay or true organic (use NRCS definitions). Yes = 4 to 6.0 D1.3. Characteristics and distribution of persistant plants. S95% of area Wetland has persistent, ungrazed, plants > 95% of area points (5.3) points (5.3) points (5.3) Add the points in the boxes above points = 2 points # 1 <u>DEPRESSIONAL AND FLATS WETLANDS</u> Water Quality Functions - Indicators that the site functions to improve water quality Characteristics of surface water outflows, trom the weuents. Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). C points #3. points = 0 Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet This is the area that is ponded for at least 2 months. See description in manual. Area seasonally proded is 1× it call area of wetland Area seasonally ponded is 2× it total area of wetland Area seasonally ponded is 2× it total area of wetland Area seasonally ponded is 2× it tatal area of wetland D 1.0. Does the site have the potential to improve water quality? D 1.1. Characteristics of surface water outflows from the wetland: Wetland has porsistent, ungrazed, plants > ½ of area Wetland has persistent, ungrazed plants > ½ 0 of area Wetland has porsistent, ungrazed plants < 1 ½ of area D 1.4. Characteristics of seasonal ponding or Inundation Total for D 1

		,
Rating of Site Potential If score is: 12-16 = H 6-11 = M 0-5 = L Record the	Record the rating on the first page	ى ئ
D 2.0. Does the landscape have the potential to support the water quality function of the site?	site?	2000000
0 2.1. Does the wetland unit receive stormwater discharges?	Yes = 1 No (Q	0
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants?	Yos # 1 No 60	ଚ
D 2.3. Are there septic systems within 250 ft of the wetland?	Yos w 1 No 👀	ે
D 2.4. Are there other sources of pollutants coming into the wedand that are not listed in questions D 2.1-D 2.3? Source	5D2.1-D2.3? Yes=1 No&0)	၁
Total for D 2	And the points in the boxes above	o

Rating of Landscape Potential If score is: 3 or 4 = H 1 or 2 = M V 0 = L Record the rating on the first page

D 3.0. is the water quality improvement provided by the site valuable to society?	
0.3.1. Does the wedand discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the $303(4)$ las?	0
D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list? Yes 1 No = 0	
0.3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality (arower YES if there is o TMDL for the bosin in which the unit is found?)	4
Total for D 3 Add the points in the boxes above	Ŋ
Rating of Value If score is: V 2-4 = H 1 = M 0 = L Record the rating on the first page	

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'n

Wetland name or number

DEPRESSIONAL AND FLATS WETLANDS

Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation	nd stream degradat	lo lo
D 4.U. Does the site have the potential to reduce flooding and erosion?		
0.4.1. Characteristics of surface water outflows from the weeland: Wethand is a depression or flat depression with no surface water leaving it (no outlet) Wethand has an intermittently flowing stream or distrit, OR highly constricted permanently flowing outletpoints = 2 Wethand is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing district points = 1 Wethand has an unconstricted, a lightly constricted, surface outlet that is permanently flowing outlet and wethand has an unconstricted.	pointse4	T
tiet	c outet. For wellands points = 7 points = 3 points = 3 points = 3 points = 3 points = 4	0
O 4.3. <u>Contribution of the wordand to storage in the watershool</u> : Estimate the ratio of the area of upstroam basin contributing surface water to the wetland to the area of the wetland unit itself. The area of the basin is less than 100 times the area of the unit. The area of the basin is 10 100 times the area of the unit. The area of the basin is more than 100 times the area of the unit. Entire wetland is in the Flats class.	points 2 5	V)
Add the points as 22-16 = H V 6-11 = W 0-5 = L	Record the rating on the first page	first page
O 5.0. Does the landscape have the potential to support hydrologic functions of the site? 05.1. Does the wetand roceive stormwater discharges?	Yese 1 Nde	0
D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? Yes # 1	Yes # 1 No	0
o than 25% of the contributing basin of the wetland covered with intensive human land dence/ac, urban, commordal, agriculture, etc.)?	id uses (residentla) at Yes = 1 No = 0	0
Add the points in t	the boxes above	0
	Record the rating on the first page	first page
D 6.0. Are the hydrologic functions provided by the site valuable to society?		galantaggg
ion that best matches con eff.more than one condition dient into areas where flou Ink.	hes conditions around condition is met. here flooding has points = 2 points = 1 points = 1 holdflows that the	
water storod by the wetland cannot reach areas that flood. Explain why	points = 0	

D 6.2. Has the site been identified as important for fleed storage or fleed conveyance in a regional fleed control plans 100 = 100points = 0 Add the points in the boxes above There are no problems with flooding downstream of the wetland. Ruting of Value if score is: 2.4 # H L 1 # M O B L Total for D 5

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Record the rating on the first page

R.1.0. Does the site have the potential to improve water quality? R.1.1. Area of surface depressions within the Riverine wetland that can trap sodiments during a flooding event: Depressions cover > 3, area of wetland Depressions cover > 3, area of wetland Depressions cover > 4, area of wetland Depressions cover > 4, area of wetland Depressions cover > 5, area of wetland	8 8 8 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
res of surface depressions within the Riverine wedand that can trap sodiments during a flooding event: epressions cover » 1/4 area of wedand persons cover » 2/4 area of wedand points are one of wedand points of the cover of wedand points.	8 4 7 0
	8 4 7 0
	4 % 0
	0 0
	0
No depressions present	
R 1.2. Structure of plants in the wetland (areas with >90% cover at person height, not Cowardin classes)	1
Trees or shrubs > 2/2 area of the wetland	∞
Trees or shrubs > 1/3 area of the wetland points = 6	9
Herbacoous plants (> 6 In high) > 2/3 area of the wetland	
Herbaceous plants (> 6 in high) > ² / ₃ area of the wetland	9
Trees, shrubs, and ungrazed herbaceous < 1/1 area of the wetland	0
Total for R 1 Add the points in the baxes above	
Ratios of She Potential Historia 12-15 = H 6-11 = M 0-5-1	Record the rating on the first page

R 2.1. Is the wetland within an incorporated city or within te/UGA?
R 2.2. Does the contributing basin to the wetland include a USA or incorporated area? Yes=1. No = 0
R.2.3. Does at least 10% of the contributing basin coftain tilled fields, pastures, or forests that have been elearcut within the last 5 years? Yes = 1 No = 0
R 2,4, is > 10% of the area within 150 ft of the westland in land uses that generate pollutants? Yes # 1. No # 0
8.25. Are there other sources of pollutarize coming into the wetland that are not listed in questions R.2.1-R.2.4 Other sources You = 1. No = 0
Total for R.2 Add the points in the boxes above
Rating of Landscape Potential If score is: 3-6 ** H 1 or 2 ** M O ** L Record the rating on the first page

	Total for R 3 Add the points in the boxes above
_	YES if there is a TMDL for the drainage in which the unit is found) Yes = 2 No = 0
	R3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? (answer
	Yes=1 No=0
	R 3.2, is the wetland along a stream or river that has TMDL limits for nutrients, toxics, or pathogens?
	You 1 Now 0
	בייד וז מוכל שפונים סומון? פ זיניסמון מן זונכן למובנים מון נונס מסמומין ומינים מון מונים מונים מון מונים מינים מינ
L	Clear in which was not a second to the secon
***************************************	R 3.0. Is the water quality improvement provided by the site valuable to society?

Wetland name or number

RIVERINE AND FRESHWATER TIDAL FRINGE WETLANDS	NGE WETLANDS
Hydrologic Functions - Indicators that site functions to reduce flooding and stream erosion	ice flooding and stream erosion
R 4.0. Does the site have the potential to reduce flooding and erosion?	
R 4.1, Characteristics of the everbank storage the wetland provides:	
Estimate the average width of the wetland perpendicular to the direction of the flow and the width of the	the flow and the width of the
stream or river channel (distance between banks). Calculate the ratio: (average width of wetland)/(average	age width of wedand)/(average
width of stream between banks).	
If the ratio is more than 20	6 a Sujod
If the ratio is 10-20	points # 6
If the ratio is 5-<10	points = 4
If the ratio is 1S	points = 2
If the ratio is < 1	points 1
R 4.2. Characteristics of plants that slow down water velocities during floods: Treet large woody debris as forest or	t large woody debris as forest or
shrub. Choose the points appropriate for the best description (polygons need to have >90% cover at person	Jub have >90% cover at person
height. These are NOT Cowardin classes).	
Forest or shrub for >1/3 area OR emergent plants > 1/3 area	points # 7
Forest or shrub for > 1/10 area OR emergent plants > 1/3 area	points = 4
Plants do not meet above criteria	points = 0
Total for R.4	Add the points in the boxes above
Rating of Site Potential If score is: 12-16 = H 6-11 = 6-11 = 6-5 = L	Record the rating on the first page
R 5.0. Does the landscape have the potential to support the hydrologic functions of the site?	ctions of the site?

Rating of Site Potential If score is: 12-16 = H6-11 = 40 - 40 - 40 - 40 - 40 - 40 - 40 - 40	Record the rating on the first page
R 5.0. Does the landscape have the potential to sopport the hydrologic functions of the site?	s of the site?
R S.1. Is the stream or river adjacent to the westand downcut?	Yes=0 Now1
R S.2. Does the up-gradient watershed include a UGA or incorporated area?	Yes#1 No#O
R S.3. is the up-gradient stream or giver controlled by dams?	Yes # O No # 1
Total for R.5	Add the points in the boxes above
Rating of Landscape Potential If score is:3 = H tor 2 = M 0 = L	Record the rating on the first page

_						_			l .
	he first page								the first page
Add the points in the boxes above	Record the rating on the first page	n.		ploms that result in damage to	points = 1	points = 0	ince in a regional flood control plan? Yes=2 No=0	Add the points in the boxes above	Record the rating on the Jirst page
,	Rating of Landscapa Potential If score is: 3 a H 3 or 2 a M 0 a L	R 6.0. Are the hydrologic functions provided by the site valuable to zociety?	R.G.1. Distance to the nearest areas downstream that have flooding problems? Chades the description that best fits the site.	The sub-basin immediately down-gradient of the worland has flooding problems that result in damage to	numan or natural resources (e.g., nouses or salmon redus). Surface flooding problems are in a sub-basin farther down-gradient	No flooding problems anywhere downstream	R 6.2. Has the site been identified as important for flood stenage or flood conveyance in a regional flood control plan? Yes = 2 No = 0		Rating of Value if score is: 2-4 = H1 = M0 = L
Total for R.S	Rating of Landscape 1	R 6.0. Are the hydro	R 6.1. Distance to the Choose the des	The sub-basin i	Surface floodin	No flooding pro	R 6.2. Has tha site be	Total for R 6	Rating of Value if sec

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HABITAT FUNCTION H 1.0. Does the site h	These questions apply to HABITAT FUNCTIONS - Indicators that site functions H 1.0. Does the site have the potential to provide habitat?	These questions apply to wetlands of all HGM classes. HABITAT FUNCTIONS - Indicators that site functions to provide important habitat H.1.0. Does the site have the potential to provide habitat?	of all HGM classes. e Important habitat	
H 1.1. Structure of plant Cowardin plant of of % ac or more the	t community: <i>Indicators a</i> lasses in the watland. Up t han 10% of the unit if it is:	re Cowardin classes and str to 10 patches may be comb smaller than 2.5 ac, Add th	H 1.1. Structure of plant community: Indicators are Cowardin classes and strata within the Forestad class. Check the Cowardin plant classes in the wetland. Up to 3.0 patches may be combined for each class to meet the threshold of % or or more than 10% of the unit if it is smaller than 2.5 or, Add the number of structures or more change the Astructures or more plants. Asynatic bed	
Scrub-shrub Forested (an If the unit h The Forested that each or	Eferegent Scrub-chrub (areas where shrubs have > 30% cover) Scrub-chrub (areas where shrubs have > 30% cover) If the unit has a Forcated class, check ff. The Forested class has a low of a strata (canopy, sub that each cover 20% within the Forcated colonron	> 30% cover) % cover) a (canopy, sub-canopy, shr ted polyren	Setureport Seturation (areas where shrubs have > 30% cover) Seturations of seturations of seturations of seturations of seturations points = 2 Seturations of seturation	0
H 1.2. Hydroporiods Check the types of water more than 100 of the we permanently flooded Seasonally flooded to Statusted only Permanently flowing Seasonally flowing Seasonally flowing Howing Seasonally flowing Table Fringe wettand	oporlods. Ath types of water regimes (hydroperlods) present with seth at 10% of the westland or X at to count (see text for de permanently flooded or inundated Seasonally flooded or inundated Occasionally flooded or inundated Seasonally flooded or inundated Permanently flowing aream or river in, or adjacent to, th Seasonally flowing stream or river in, or adjacent to, th Lake Frings wetland The Frings wetland Freshwater tidal wetland	Hydroporiods Check the types of water regimes (hydroporiods) present within the wetland. The water remove than 10% of the wetland of x as to count (see text for descriptions of hydroporiods). More than 10% of the wetland of x as to count (see text for descriptions of hydroporiods). Seasonally flooded or inundated Saturated only Perminantity flowing stream or river in, or adjacent to, the wetland Seasonally flowing stream in, or adjacent to, the wetland Lake Fringe wetland Frechwater tidal wetland	Hydroporiods Check the types of water regimes (hydroporiods) present within the wetland. The water regime has to cover more than 10% of the wetland or it act to count (see text) or descriptions of hydroporiods). Permanently flooded or inundated Seasonally flooded or inundated Seasonally flooded or inundated Seasonally flooded or inundated Seasonally flowing stream or river in, or adjacent to, the wetland Seasonally flowing stream or river in, or adjacent to, the wetland Seasonally flowing stream in, or adjacent to, the wetland Lake Friehwater tidal wetland 2 points Preshwater tidal wetland 2 points	
H 13. Richness of plant spackers Count the orimber of plants Different patches of the cam Different patches of the cam the species. Do not include If you counted: > 13 species > 13 species < 5 species < 5 species	species or of plant species in the w s of the same species can b to the ladde Eurasian mily. 19 species 5 - 19 species 5 - 25 species	Richness of plant species Count the number of plant species in the weeland that cover at least 10 ft? Officeror precises of the same species can be comblined to meet the size this the species. Do not include Eurasian milfoli, reed comarguess, purple bot If you countsets -15 species 5 - 19 species < 5 species.	Richness of plant species Court the number of plant species in the wetland that cover at least 10 ft? Court the number of plant species can be contained to meet the size threshold and you do not have to name the species. Do not include Eurasian miljoil, reed canarygrass, purple loosestrife, Canadian thistie the species. Do not include Eurasian miljoil, reed canarygrass, purple loosestrife, Canadian thistie If you counted: > 19 species 19 species	0
H 1.4. interspersion of habitats Dealded from the diagram the diases and unvergets have four or more plant t	abilitis Biggons below whether intersp regested areas (can include or plant classes or three classes ar plant classes or three point Low = 1 point	interspersion of habitats Decide from the degrams below whether interspersion among Cowardin plants classes (a the classes and unvergeated areas (can include open water or muditats) is high, moderate here four or more plant classes or three classes and open water, the rating is always high have four or more plant classes or three classes and open water, the rating is always high have four or more plant classes or three classes and open water, the rating is always high may four four four four four four four four	escribed is sew, or n	0
All three diagrams in this row are HIGH = 3points				

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Wetland name or number

Large, gowned, woody depris within the wetland (> 4 in diameter and 6 it long).	
Standing snags (dbh > 4 in) within the wetland	
Undertail banks are present for at least bob if (2 m) and/of overhanging plants extends at least 3.3 ft (1 m) ever a stroam (other) in, or contributious with the wetland, for at least 33 ft (10 m) ever the contributions.	
Shape Seep balls So International that might bot used by beaver of mustrat for denning (> 30 degree slope) Seep so State Seep so	
where wood is exposed; At least X ac of thin-stemmed persistent plants or woody branches are present in areas that are	
permanently or seasonally inundated (structures for orga-laying by amphibians)	
V Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata)	
Total for H 1 Add the points in the boxes above	4
Rating of Site Potential If score is: 15-18 = H 7-14 = MV 6-6 = L Record the rating on the first page	e first pag
H 2.0. Does the landscape have the potential to support the habitat functions of the site?	
habitat (include only habitat that d	
+ [(% moderate and low intensity land uses)/2] ==	
1 total accession and accession of a major = 3	-
	a co
ed habita	
Calculate: % undisturbed habitat + [(% moderate and low intensity land uses)/2] = 1 %	
الراب الراب الراب الراب الراب الراب الراب الراب الراب الراب الراب الراب الراب الراب الراب الراب الراب الراب ال	
Undisturbed habitat 10-50% and > 3 patches	
7770	
> 50% of 1 km Polygon is high intensity land uso	ļ
Total for H.2. Add the nature in the house shows	K
Rating of Landscape Potential if score is: 4-6 = H 1-3 = M <1 = L Record the rating on the first page	first page
H 3.0. Is the habitat provided by the site valuable to society?	
H.3.1. Does the site provide habitat for species valued in laws, regulations, or policies? Choose only the highest score	
one interest Anti-or the following circerta: — It has 3 or more priority habitate within 100 m (con next name)	r
— It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)	1
It is mapped as a location for an individual WDFW priority species It is a Windows of Utal Consequence of the Conseque	
It has been categorized as an important habitat site in a local or regional comprehensive plan, in a	
Shoreline Master Plan, or in a watershed plan Site has 1 or 2 priority habitats (listed on next page) within 100 m	
Design of the constitution of	

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WDFW Priority Habitats

Priority.habitats.listed.by.W.DEM (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in Washingston Oepartment of Flat and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washingston, 177 pp. http://wdfw.ma.gov/pubitectons/00165/wdfwg0165.pdf or access the list from here: http://wdfw.ma.gov/conservations/pis-flat.)

Counthow many of the following priority habitats are within 330 (t (100 m) of the wetland unit. NOTE: This question is independent of the land use between the wetland unit and the priority habitat.

- Aspen Stands: Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- Blodiversity Areas and Corridors: Areas of habitat that are relatively important to various species of native fish and
 wildlife (full descriptions in WDFW PHS report).
- Herbaccous Baids: Variable size patches of grass and forbs on shallow solls over bedrock.
- Old-growth /Mature forests: <u>Old-growth west of Cascade crest</u> Stands of at least 2 tree species, forming a multilayered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) > 32 in (81 cm) dish or > 200 years of ago, <u>Mature Jorests</u> - Stands with average diameters exceeding 21 in (53 cm) dish; crown cover may be less than 100%; decay, decadence, numbers of stags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.
- Oregon White Oaks: Woodland stands of pure oak or oak/confler associations where canopy coverage of the oak /component is important (full descriptions in WDFW PHS report p. 158 – see web link above).
- Riparian: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.
- ---- Westside Prairies: Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (fuil descriptions in WDFW PHS report p. 161 – see web link above).
 - Instream: The combination of physical, biological, and chomical processes and conditions that interact to provide functional life biscopy roquirements for instream fish and widdlie resources.
- Nearshore: Robetvoly undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and
 Puges Sound Nearshore, (full excryptions of habitats and the definition of relatively undisturbed are in WDFW report
 see whe link on previous page).
- Caves: A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock,
 ico, or other geological formations and is large enough to contain a human.
- Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation
- Falus: Homogenous areas of rock rubble ranging in average size 0.5 6.5 ft (0.15 2.0 m), composed of basait, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cilifs.
 - Snags and logs: Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristists to enable cavity execution/use by widdlife, Priority snags have a diameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 it (6 m) long.

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed

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Wetland name or number ___

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Deck off any attents that apply to the wedand. Citels the category when the appropriate criteria are met.	
SV_LAN. Estuaring Wetlands Does the weband meet the following criteria for Estuaring wetlands?	
— I no commany water regime is total, — Vogetated, and — Vogetated, and — Vogetated, and — Vota salishy orester than 0.5 and — Vota salishy orester than 0.5 and	* .
fe Refuge, National Park, National Est Mronmental, or Scientific Reserve des Yes =	- 5
SC1.2 is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? —The wetland is relatively undisturined (has no diking, dishing, filling, cultivation, grazing, and has less than 10% cover of non-native plant species. If non-native species are Sportfart, see page 25 —than 10% cover of non-native class to see the second in the second of the wetland has a 100 ft buffer of shrub, forest, or ungazed or un-	뷿
mowed grassland. — The webland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wedands. Yes = Category! No = Category!	<u>=</u>
SC 2.0. Wetlands of High Conservation Value (WHCV) SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? No = Not a WHCV	Gt.
SC2.3. Is the wetland in a Socion/Township/Range that contains a Natural Heritage wetland? http://www.l.dnr.wa.gov/nhp/rafdex/dataccarch/wnbowrtands.ndf http://www.l.dnr.wa.gov/nhp/rafdex/dataccarch/wnbowrtands.ndf Yos — Contact WiNHP/WDNR and go to SC2.4 SC2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of Hyc Conservation Value/and listed it on their weeste? Yos — Cottogory! No = Note a WRICY	
nd (or any part of the unit) meet both the criteria for soils and vegeration in navae? YES you will still need to rate the wetland based on its functions, which the wetland unit have organic soil horizons, cither peats or mucks, that sin of the soil profile? Yes 2.5 in of the soil profile? Help and wetland unit have organic soils, other peats or mucks, that are for or an impermeable hardpan such as clay or volcanic ash, or that are floating or an impermeable hardpan such as clay or volcanic ash, or that are floating the peats or mucks have more than 70% cover of mosts at ground (eve), 31.3	
cover of plant species listed in Table 4? NOTE: If you are uncertain about the oxecut of messes in the understeer, you may substitute that circles by measuring the plant about the oxecut of messes in the understeer, you may substitute that circles by measuring the plant species in Table 4 are present; the weetland is a beg. It leaves that to be for the water of an experient of a beg. SC3.4. Is an area with peate or mucks forested (3 30% cours) with Sifes spruce, subsidene fit, western each occupancy, western hemick, longespole pine, qualifier assess. Engineerin spruce, or vestern white pine, AND any of the species (or combination of species) listed in Table 4 provide more than 30% of the cover unger, the conservinger the company.	Cat.
Yes = Is a Category I bog / No 4 is not a bog	

SC 4.0. Forested Wetlands	
Does the weetland have at loast 1 contituents acre of forces that meets one of these criteria for the WA Department of Eth and Wildlife's forcests as priority habitates? If you answer YE's you will still need to rate the wetland based on its function of the second one on its function of Cascade creat). Stands of at least two tree species, forming a multi-lated cannow with occusional small openings, with at least 8 trees/ec (20 trees/ha) that are at least 200 years of age OR have a dismeter at breast height (fair) a 32 in (18 and 10) more. — Mature foresit (wart of the Cascade Creat); Stands where the largest roce are 80-200 years old OR the species that make up the canopy have an average diameter. (Ab) exceeding 21 in (53 cm). Yes = Category I (Ny And 10 year of forested not this section)	ੂੰ ਦ
SC 5.0. Wetlands in Coastal Lagoons Doot the wetland most all of the following criteria of a wetland in a coastal lagoon? — The wetland lists in a deposation adjocent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks — The lagoon in which the wetland is leasted contains ponded water that is callen or brackish (> 0.5 ppt) during most of thy opan last leasts a portion of the lagoon (preedicable measured nor the bottom) NOS 5.1. Does the wetland meet all of the fellowing water or or the bottom).	
The wetland is relatively undisturbed (has no diking, disching, filling, cutulvation, grazing), and has less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). — At least X of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grazind. — The wetland is larger than ½, a ac (4350 ft²) Ves = Category I No = Category I	<u>=</u>
S.C. 6.0. introducal Wediands Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? If you can were yes usuall self need to rate the wetland based on its habitat functions. In practical terms that means the following geographic areas: — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 105 Vest—Go to SC 6.1 No not an interdunal wetland for rather	ā
SC 6.1. Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H.H.H or H.H.M for the three aspects of function)? SC 6.2. Is the wetland 1 ac or larger, or Is it in a mosaic of wetlands that is 1 ac or larger, or Is it in a mosaic of wetlands that is 1 ac or larger.	5 #
SC 6.3. is the unit between 0.1 and 1 ac, or is it in a mosaic of wedands that is between 0.1 and 1 ac? Yes = Category II No = Category IV	Cat Eat E
Category of wetland based on Special Characteristics If you answered No for all types, enter "Not Applicable" on Summary Form	子

Wetland name or number

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Wetland Rating System for Western WA: 2014 Update Rating Form – Effective January 1, 2015

RATING SUMMARY – Western Washington

- Date of site visit 5 14 (22	5/30	Wetland has multiple HGM classes? Y V
Name of wetland (or, ID#): Linds Nice	Rated by E Milly L. Hongutrained by Ecol	HGM Gass used for rating Wetland

NOTE: Form is not complete without the figures requested (Figures can be combined). Source of base aerial photo/map

OVERALL WETLAND CATEGORY 111 (based on functions or special characteristics)

1. Category of wetland based on FUNCTIONS Category 1—Total score = 23 - 27

Category I – Total score = 23 - 27

Category II – Total score = 20 - 22

Zategory III – Total score = 16 - 19

Category IV – Total score = 9 - 15

Score for each function based on three rathings (roter of ratings is not important)

FUNCTION	Improvi Water Qu	ag ality	£	lydrologic	ξ		Habitat		
	(Circle the appropriate	do a	ropri	ote roth	8	
Site Potential	(м)	4	æ	3	3	Ī		5	
Landscape Potential	Σ H	9	x	≥(3	=	Σ̈́	5	
Value	Œ Z		x	3		E	Σ		TOTAL
Score Based on	Q			U					녣
				١		1	١		

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarino	пп
Wetland of High Conservation Value	I
<i>2</i> 08	I
Mature Forest	1
Old Growth Forest	ĭ
Coastal Lagoon	11 1
interdunal	ли ши
None of the above	

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Wetland name or number

Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

Map of:	To answer questions: Figure #	#2
Cowardin plant classes	D1.3, H1.1, H1.4	Ī
Hydroperlods	D1,4, H1,2	Ī
Location of outlet (can be added to map of hydroperiods)	D11,041	
Boundary of area within 150 ft of the wetland (can be added to another figure) D 2.2, D 5.2	D 2.2, D 5.2	
Map of the contributing basin	D 4.3, D 5.3	Γ
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H21, H22, H2.3	Γ
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website) D.3.1, D.3.2	03.1, 03.2	Γ
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D33	

Riverine Wetlands

Map of.	To answer questions:	Figure #
Cowardin plant classes	H11, H14	
Hydroperiods	H 1.2	
Ponded depressions	81.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	824	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (can be added to another figure)	84.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland odge - including	H 2.1, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
Scroon capture of map of 303(d) listed waters in basin (from Ecology website)	R3.1	
Screen capture of list of TMDLs for WRIA In which unit is found (from web)	R3.2, R3.3	

Lake Fringe Wetlands

9 # H,H,H 7 # H,H,M 7 # H,H,L 7 # H,H,L 6 # H,M,L 6 # M,L,L 5 # M,L,L 4 # M,L,L 3 # L,L,L

Wap un	Lo answer duestions: Pigure #	Ξ.
Cowardin plant classes	L1.1, L4.1, H1.1, H1.4	Г
Plant cover of trees, shrubs, and herbaceous plants	1.1.2	П
Boundary of area within 150 ft of the wetland (can be added to another figure)	12.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H21, H22, H2.3	Г
polygons for accessible habitat and undisturbed habitat		
Scroen capture of map of 303(d) listed waters in basin (from Ecology website)	13.1, 13.2	1
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	13.3	1
		1

Slope Wetlands

Map of party day at the second property of the second party and the second party at the second party and the second party at t	To answer questions:	Figure #
Cowardin plant classes	H11, H1,4	
Hydroperlads	H 1,2	
Plant cover of dense trees, shrubs, and herbaceous plants	\$1.3	
Plant cover of dense, rigid trees, shrubs, and herbaccous plants	54.1	
(can be added to flaure above)		
Boundary of 150 ft buffer (can be added to another figure)	52.1, 55.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 21, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
Scroon capture of map of 303(d) listed waters in basin (from Ecology website)	53.1, 53.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	53.3	

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HGM Classification of Wetlands in Western Washington

For questions 1-7, the criteria described must apply to the entire unit being rated

probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you questions 1-7 apply, and go to Question 8.

Are the water levels in the entire unit usually controlled by tides except during floods?

NO- go to 2

YES - the wetland class is Tidal Fringe - go to 1.1

1.1 Is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

NO - Saltwater Tidal Fringe (Estuarine)

lf your wetland can be classified as a Freshwater Tidal Fringe use the forms for Riverine wetlands. If it is Saltwater Tidal Fringe it is an Estuarine wetland and is not scored. This method cannot be used to YES - Freshwater Tidal Fringe score functions for estuarine wetlands. The entire wetiand unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit.

'NO → go to 3

YES - The wetland class is Flats Hyour wetland can be classified as a Flats wetland, use the form for **Depressional** wetlands

3. Does the entire wetland unit meet all of the following criteria?

_The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size; t least 30% of the open water area is deeper than 6.6 ft (2 m).

Does the entire wetland unit meet all of the following criteria? / NQ - go to 4

YES - The wetland class is Lake Fringe (Lacustrine Fringe)

The water flows through the wetland in one direction (unidirectional) and usually comes from The wettand is on a slope (slope can be very gradual),

seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks, The water leaves the wetland **without being impounded**.

NO L go to 5

YES - The wetland class is Slope

shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft NOTE: Surface water does not pond in these type of wetlands except occasionally in very small and deep).

Does the entire wetland unit meet all of the following criteria?

The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,

The overbank flooding occurs at least once every 2 years.

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m

Vetland name or number

NOTE: The Riverine unit can contain depressions that are filled with water when the river is not

surface, at some time during the year? This means that any outlet, if present, is higher than the interior 6. Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the of the wetland,

NO - go to 7

YES-The wetland class is Depressional

maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural Is the entire wetland unit located in a very flat area with no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be

NO - go to 8

YES - The wetland class is Depressional

classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wedand has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rading system if you have several HGM classes present within the Your wetland unit seems to be difficult to classify and probably contains several different HGM wetland unit being scored.

NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit, classify the wetland using the class that represents more than 90% of the total area.

If you are still unable to determine which of the above criteria apply to your wedand, or if you have more than 2 HGM classes within a wetland boundary, classify the wetland as Depressional for the rating.

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J þ M Weetand has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 1 Weetand has a last depression (QUESTON 7 on key), whose outlet is a permanently flowing direh. points = 1 D.13. The soil 2 lib below the surface (set diff invert) is true elay or true organic (see NRCS eights)/res 4 No (5) D.13. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes): Weetand has persistent, ungrazed, plants > 3% of area Weetand has persistent, ungrazed, plants > 3, of area Weetand has persistent, ungrazed plants > 1, of area Weetand has persistent, ungrazed plants > 1, of area points = 1 points (4) Wodand has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. Add the points in the boxes above Water Quality Functions - Indicators that the site functions to improve water quality points = 0 Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). **DEPRESSIONAL AND FLATS WETLANDS** D 1.4. Characteristics of sensonal gonding or inundation: This is the area that is ponded for at least 2 months. See description in manual. Area seasonally ponded is > % total area of wetland Area seasonally ponded is > % total area of wetland D 1.0. Does the site have the potential to improve water quality? D 1.1. Characteristics of surface water outflows from the wordand: Area seasonally ponded is < ½ total area of wetland Total for D 1

Rating of Landscape Potential if score is: 3 or 4 = H 1 or 2 = M 10 = L Record the rating on the first page

	Record the rating on the first page	0=r	Rating of Value If score is: \(\int 2.4 = H 1 = M 0 = L	Rating of Value
3	Add the points in the boxes above			Total for D3
ر.	Year 2 No = 0	found)?	if there is a TMDL for the basin in which the unit is found)?	if there is a 1
,	D 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality-(gnswer YES	I plan as import	been identified in a watershed or local	D 3.3. Has the site
	on the 303(d) list? Yes = 1 No = 0	uatic resource	D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list?	D 3.2. Is the wetlan
>	Yes 21 No # 0			303(d) list?
,	D 3.1. Does the wetland discharge directly (i.e., within 1 ml) to a stream, river, lake, or marine water that is on the	mi) to a stream,	etland discharge directly (i.e., within 1 i	D 3.1. Does the we
100000000000000000000000000000000000000	ble to society?	y the site valu	D 3.0. is the water quality improvement provided by the site valuable to society?	D 3.0. is the wate

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DEPRESSIONAL AND FLATS WETLANDS	
Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation	-
D 4.0. Does the site have the potential to reduce flooding and erosion?	
D 4.1. Chanacteristics of surface water outflows from the wechood: Wetland is a depression or flat depression with no surface water leaving it (no outlet) Wetland is a dispression of flat depression with no surface water leaving it (no outlet) Wetland is a flat depression (QUESTION) on keyl, where outlet is a permanently flowing district points of a Wetland has an unconstricted, eather constricted, surface outlet that is commonive flowing outlet and in wetland has an unconstricted.	7
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0
bution of the wething to storage in the watershed; Estimate the ratio of the area of upstream buting surface water to the wetland to the area of the wetland unit itself. so of the basin is less than 10 times the area of the unit on of the basin is 100 times the area of the unit en of the basin is more than 100 times the area of the unit wetland is in the Flats class.	M
Total for D 4 Add the points in the baxes above Rather of Site Potential if score is: 12-16 = M	4
support hydrologic functions of the site?	
D.S.1. Does the wetland receive stormwater discharges?	0
D 5.2. is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? Yes = 1. No 60	ે
D5.3. is more than 25% of the contributing basin of the workand covered with intensive human land uses (residential at >1 residence/se, urban, commercial, agriculture, etc.)?	ગ
Add the points i	P
Rating of Landscupe Potential If score Is: 3 = H 1 or 2 = M C = L Record the rading on the first page D. R. C. Tabe the hardschart financial and hardschart for the first page D. R. C. Tabe the hardschart financial and hardschart financ	first page
t matches con in one conditio	
• Flooding occurs in a sub-basin that is immediately down-gradient of unit. • Surface flooding problems are in a sub-basin thather down-gradient. points = 1. Flooding from groundwater is an state in the sub-basin. The oxisting or potential outflow from the websard is so constrained by human or natural conditions that the water stored by the wetland cannot reach areas that flood. Explain why points = 0. There are no problems with flooding downstream of the wetland.	and the second
D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? Yes = 2 No 4 0	0
Total for D 6	er.u
Rating of Value if score is: 2.4 = H 1 = M 0 = L	first poor

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R 1.0. Does the site have the potential to improve water quality?	
R 1.1. Area of surface depressions within the Riverine wetland that can trap sediments during a flooding ovent:	ling avent:
Depressions cover > 3/4 area of wetland	points = 8
Depressions cover > ½ area of wetland	points = 4
Depressions present but cover < ½ area of wetland	points = 2
No depressions prosent	points # 0
R 1.2. Structure of plants in the wetland (areas with >90% cover at person hoight, not Cowardin classes)	i _
Trees or shrubs $> ^2/_3$ area of the wetland	points # 8
Trees or shrubs $> ^{1}/_{3}$ area of the wetland	polntara 6
Herbaceous plants (> 6 In high) > 2 /3 area of the wetland	points = 6
Herbaccous plants (> 6 In high) > $\frac{1}{2}$ area of the wetland	points = 3
Total for 8 1	points = 0
o Potential If score is: 12:16 = H 6:11 a M 6-5 a L	Record the ratios on the first page
R 2.0. Does the landscape have the potential to support the water quality function of the site?	te?
R.2.1. Is the wetland within an incorporated city or within its UGA?	Yes=2 No=0
R 2.2. Does the contributing basin to the wetland include a UGA or incorporated area?	Yes #1 No # 0
R.2.2. Does at least 10% of the contributing basin contain tilled field/spactures, or ferests that have been cleareut within the last 5 years? Yes = 1 No =	Soen clearcut Yes = 1 No = 0
R.2.4. is > 10% of the area within 150 ft of the wedand in languages that generate pollutants?	Yes #1 No #0
R.2.5. Are there other sources of pollutants coming into the workand that are not listed in questions R.2.1.R.2.4. Other sources.	32.1-R2.4 Yes=1 No=0
Total for R 2 Add the points in the boxes above	he boxes above
Rating of Landscape Potential If score is: 3-6 = H 1 or 2 = M 0 = L	Record the rating on the first page
R 3.0. is the water quality improvement provided by the site valuable to society?	
R 3.1. Is the wordand along a stream of river that is on the 303(d) list or on a tributary that drains to one within 1 mi?	one within 1 mi?
	Yes=1 No=0
R 3.2. is the wediand along a stream or river that has TMDL limits for nutrients, toxies, or puthogens?	4
and the second s	ORON THESE
K 3.3. His the size been identified in a watershed of local plan as important for maintaining water quality f (answer YES if there is a TMDL for the drainage in which the unit is found)	Yes 2 No a 0
Total for B 3	and passed about

Wetland name or number _

R 4.0. Does the site have the petential to reduce flooding and erosion?	oning and stream erosion
R 4.1. Characteristics of the overbank storage the wetland provides: Estimate the overage width of the wetland perpendicular to the direction of the flow and the width of the estiman or rive hannol distance between banks). Calculate the ratio: (average width of wetland)/(average width of stream between panks).	and the width of the th of wetiand]/(average
If the ratio is more than 20	points = 9
If the ratio is 10-20	points = 6
If the ratio is 5-<10	points = 4
If the ratio is 1-45	points = 2
If the ratio is < 1	points = 1
R4.2. Characteristics of plants that slow down water velocities during floogds."Treat large woody debris as forest or safuit. Choose the points appropriately for the best description jodifons need to have 250% cover at person helpti. These are <u>kDD. Choose flo</u> stses!.	roody debris as forest or >>90% cover at person
Forest or shrub for >1/3 area OR emergent plants > 2/3 area	points = 7
Forest or shrub for > 1/10 area OR emergent plants 7/1, area	points = 4
Plants do not moet above criteria	points = 0
	Add the points in the boxes above
Rating of Site Potential if score is: 12-16 at H 6-11 a M D-5 = L	Record the rating on the first page
R 5.0. Does the landscape have the potential to support the hydrologic functions of the site?	f the site?
R 5.1. Is the stream or river adjacont to the wetland downeut?	Yes#0 No#1
R.5.2. Does the up-gradient-watershed Include a UGA or incorporated area?	Yes#1 Now0
R S.3. Is the up-gradient stream or river controlled by dams?	Yes BO No # 1
Total for RS / Add the p	Add the points in the boxes above
Rating of Landscape Potential f score s; 3 m H _ Lor 2 m M 0 m L	Record the rating on the first page
R 6.0, Are the hydrologic functions provided by the site valuable to society?	
R.6.1. Distance to the nearest areas downstream that have flooding problems? Choose the descripcion that best fits the site. The sub-basin immediately down-gradient of the weetand has flooding problems that result in damage to human or natural resources (e.g., houses or salmon redds)	t result in damage to points # 2
Surface flooding problems are in a sub-basin farther down-gradient No flooding problems anywhere downstream	points # 1
R 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? Yes = 2 No = 0	egional flood control plan? Yes # 2 No # 0
Total for R.6 Add the p	Add the points in the boxes above



inese questions apply to wedands of all How dasses. HABITAT FUNCTIONS - Indicators that site functions to provide important substitut	indicators that sit	I nese questions apply to wetlands of all HGM dasses. Jestors that site functions to provide immortant bath that	of all HGM classes. Important habitat	
H 1.0. Does the site have the potential to provide habitat?	the potential to prov	ide habitat?		000000000000000000000000000000000000000
H 1.1, Structure of plant con Cowardin plant classe of X ac or more than	nmunity: <i>indicators are</i> as in the wetland, <i>Up</i> to 10% of the unit if it is so	Cowardin classes and stra 10 patches may be comb naller than 2.5 ac. Add the	H.1.1. Structure of plant community: Indicators are Cowardin classes and strate within the Forestad class. Check the Cowardin plant classes in the wechand. Up to 10 perches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.	
Aquatic bed			4 structures or more: points # 4	
Scrub-shrub (are	principant Scrub-shrub (areas where shrubs have > 30% cover)	> 30% cover)	3 structures; points = 2	(.
Forested (areas	Forested (areas where trees have > 30% cover)	6 cover)	1 structure: point 0)
If the unit has a The Forested cla	if the unit has a Forested class, check (f. The Forested class has 3 out of 5 creata (: feanna sub-canara cha	if the unit has a Forested class, check (f. The Forested class has 3 out of 5 strats (canony estimatory charks harbreams more/around country	
that each cover	that each cover 20% within the Forested polygon	d polygon	ing the paceaust those ground-cover)	
H 1.2. Hydroperiods				
Check the types of warnove than 10% of the	ater regimes (hydroper) s wetland or ½ ac to col	Check the types of water regimes (hydroperiods) present within the wetland. The water r more than 10% of the wetland or % ac to count (<i>see text for descriptions of hudromolode</i>)	Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or % ac to count face <i>tout for the charitations of pudmondate</i> .	
Permanently floc	Permanently flooded or inundated		4 or more types presont: points = 3	
Seasonally flooded or Inundated	ed or lnundated		3 types present: points = 2	
Occasionally floo	Occasionally flooded or Inundated		2 types present: points	_
Saturated only			1 type present: points = 0	
Seasonally flowin	Politikariani ilowing suream of river in, or adjacent to, the Sessonally flowing stream in, or adjacent to, the workship	Formanding Howing stream or river in, or adjacent to, the wetland Seasonally flowing stream in, or adjacent to the worland	ŭ	
Lake Fringe wetland	land	District of the se	20000	
Freshwater tidal wetland	wettand		2 points	
H 1.3. Richness of plant species	des			
Count the number of	plant species in the we	Count the number of plant species in the wetland that cover at least 10 ft?	oft.	
Different patches of the	he same species can be	combined to meet the size	Different patches of the same species can be combined to meet the size threshold and you do not have to name	
if you counted; > 19 species	modes curusum major pedes	ı, recu cunun'yı'nası, purpi	are species. For not measure automain milyon, teen tuning yands, purpic toosks brigg, conduian trisdle If you counted! > 19 species	
51-5	5 - 19 species		points 61	_
<5s	< 5 spedes		points = 0	
H 1.4. Interspersion of habitats Decido from the diagram the classes and unvegeta have four or more plant t	arts rams below whether int jetated areas (can inclu mt classes or three class	interspersion of habitats. Decido from the observations below whether interspersion among Cowardin plants: diasses; (d the diasses and unvegetated areas (can include open watter or muditats) is high, moderate here four or more plant classes or three classes and open water, the reting is always high.	interspersion of habitats Decide from the dispats below whether interspersion among Cowardin plants dazses (described in H.1.1.), or The dazses and unvegetated areas (can include open water or muditats) is high, moderate, low, or none. If you have four or more plant classes or three dazses and open water, the rating is always high.	
) ノ			(
None & Opping	Low # 1 point	solnt	Moderate # 2 points	\mathcal{O}
All three diagrams in this row are HIGH = 3points				

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Oped the habitat features: Oped the habitat features that are present in the wetland. The number of checks is the number of points. Lingo, downed, woody debts within the wetland (> 4 in diameter and 6 ft long).	
— Summing support to the years of (2.0n) and/or overhanging plants extends at loast 3.3 ft (1.m) over a stream (or ditch) in, or contiguous with the wedand, for at loast 33 ft (1.0 m) over a stream (or ditch) in, or contiguous with the wedand, for at loast 33 ft (1.0 m) Stable steep banks of fine material that might be used by beaver or musicat for denning. (> 30 degree alpho) RS stable of court beaver activity are present (cut shrubs or trees that have not yet weathered where unod is executed.)	7
Ableas X as of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibians) Invasive plants cover loss than 25% of the wething area in every stratum of plants (see H 1.1 for list of strate)	
Total for H 1 Add the points in the boxes above	7
Rating of Site Potential If score is: 15-18 # H 7-14 # M V 0-6 # L Record the rating on the first page	on the first pag
H 2.0. Does the landscape have the potential to support the habitat functions of the site?	
H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit), المراجع ال	
if total accessible habitat is:	
	_
H 2.2. Underturbed habiter in 1 bm Delence account the constant	
Colculate: % undisturbed habitat + {(% moderate and low intensity land uses)/2] = #	
ø	
Undisturbed habitat 10-50% and > 3 patches	_
nogoh	
H 2.3. Land use Intensity in 1 km Polygon: If > 50% of 1 km Polygon is high Intensity land use	-2-
C	~
Total for H 2 Add the points in the boxes above	b
Rating of Landscape Potential if soore is: 4-6 = H 1.3 = M 2/<1 × L Record the rating on the first page	o the first page
H 3.0, Is the habitat provided by the site valuable to society?	
H3.1. Does the site provide habitat for species valued in laws, regulations, or policies? Chaose only the highest score that applies to the wedand behanated:	
Site meets ANY of the following criteria:	
L thas 3 or more priority habitats within 100 m (soo next page)	\ <u></u>
 It provides habitat for Threatened of Endangered species (any plant or animal on the state or federal lists) It is mapped as a location for an individual WDFW priority species)
 It is a Wedand of High Conservation Value as determined by the Department of Natural Resources It has been extereorized as an important habitat site in a local or resional connershands as in in a 	
Shoreline Maxter Plan, or in a watershed plan Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1	
O = 1. Record	on the first pag

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WDFW Priority Habitats

Priority, habitates, listed by WDFW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washingston Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washingson, 277 pp. http://wdfw.wa.gov/publications/00165/wdfw00165.pdf or access the list from here: http://wdfw.wa.gov/conservator.pdfs/list/list).

Count how many of the following priority habitats are within 330 ft (100 m) of the wedand unit: NOTE: This question is independent of the land use between the wetland unit and the priority habitat.

- Aspen Stands: Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- Blodlversly Areas and Corridors: Areas of habitat that are relatively important to various species of native fish and
 wildlife (full descriptions in WIPFW PHS report).
- --- Herbaccous Balds; Variable size patches of grass and forbs on shallow soils over bedrock.
- Old-growth /Nature forests: <u>Old-growth west of Gassade cress</u> Stands of at least 2 tree species, forming a multilayered canopy with occasional small openings; with at loast 8 trees/ac (20 trees/ha) > 32 in (81 cm) dah or > 200 years of eg. <u>Majauc forests</u>. Stands with averaged dameters exceeding 21 in (53 cm) dah; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.
- Oregon White Oak: Woodland stands of pure oak or oak/conifor associations where canopy coverage of the oak
 component is important (full descriptions in WDFW PHS report p. 156 see web link aboud).
- Fiparian: The area edjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ceopystems which mutually influence each other.
- Westside Prairies: Herbacous, non-forested plant communities that can either take the form of a dry prairie or a wet
 prairie [uii descriptions in WDFW PHS report p. 161 see web link above].
- Linstroam: The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instroam fish and wildlife resources.
- Mearshore: Relatively undiguitised nearshore habitats. Those include Coastal Nearshore, Open Coast Nearshore, and
 Pugge Sound Nearshore: Guild descriptions of habitats and the definition of relatively undiguities or in WDFW report see web link on previous page).
- Caves: A naturally occurring cavity, recess, void, or system of intorconnected passages under the earth in soils, rock,
 Ice, or other geological formations and is large enough to contain a human.
- Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation
- Falust Homogenous areas of reck rubble ranging in average size 0.5 6.5 it (0.15 2.0 m), composed of basait, andesite, and or sedimentary rock, including riprap sildes and mine tailings. May be associated with cliffs.
- Snags and Logs: Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity exervation/use by wildile. Priority snags have a clameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.

Note: All vogetated wetlands are by definition a priority habitat but are not included in this list because they are addressed

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CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Cook of any critical that about to the welland. Click the extensiviation the annountate critical and met		
SC 1.0. Estuarine wetlands		00040000
Does the wetland meet the following criteria for Estuarine wetlands?		
 The dominant water regime is tidal, 		
رر : :		- 1
With a salinity greater than 0.5 ppt Yes –Go to SC 1.1/ No not an estuaring wettand	ic wettand	
SC 1.1. is the wetland within a National Wildlife Belago, National Park, National Enday Reserve, Natural Area Presenve, State Park or Educational, Environmental, or Scientific Receive designated under WAC 323-20-1513 Presenve, State Park or Educational, Environmental, or Scientific Receive designated under WAC 323-20-1513	VAC 332-30-151? No - Go to SC 1.2	ŧ
SC 1.2, is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?		
— The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less than 12% cover of non-native plant species. (If non-native species are Sparting, soo page 25)	has less	 8
— At least % of the landward edge of the Wetland has a 100 ft butter of shrub, forest, or un-grazed or un- mound arrest and	ed or un-	
i least two of tho following features: tidal channels, depressions with ater wetlands.	open water, or No = Category II	= 5
SC 2.0. Wetlands of High Conservation Value (WHCV)		
d thoir website to include the list of)	is of High	
_	No-Go to SC 2.3	3
SC 2.2. is the wetland listed on the WDNR database as a Wetland of High Conservation Value?	CHON GROW III ON	
۰.	,	
_		
Yes—Contact WNHP/WDNR and go to SC2.4 (No more than 1975) and go to SC2.4 (No more than 1975) and a WHC	No m Not a WHCV	
their website? Yes * Category No = N	No = Not a WHCV	
SC 3.0. Bogs		
Does the wotland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? Use the key	Use the key	
below. If you answer YES you will still need to rate the weband based on its functions.		
od st.L. Does an area within the westand unit nave organic son norizons, ettner peats or mucks, that compose Loin or That a first 20 in of the sail profile?	No - Go to SC 3 2	
o organic soils, either peats or mucks, that are le-	16 in deep	
over bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or	of a lake or	
pond? Yes - Go to SC 3.3 No = 1	No = Is not a bog	
more than 70% cover of mosses at ground level, AN	ast a 30%	
cover of plant species listed in Table 4? Yes = Is a Catagory I bag No - C	No - Go to SC 3.4	
NOTE: If you are uncortain about the extent of mosses in the understory, you may substitute that criterion by	criterion by	
measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the		1.10
SC3.4. is an area with posts or mucks forested (> 30% cover) with Sitks soruce, subsidine fit, western red cedar.		
wostern hemlock, lodgepole plne, quaking aspen, Engelmann spruce, or western white pine, AND any of the	any of the	
3	a canopy?	
Yes a Is a Category I bog / No *	No a Is not a bor	

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SC 4.0. Forested Wetlands

Š ë ë <u>₽</u> <u>ნ</u> <u>ک</u> ق ä ā Old-growth forest (west of Cascado crest): Stands of at least two tree species, forming a multi-layered amoney with occasional small openings with at least 8 trees/loc (20 trees/ha) that are at least 200 years of age 08 have a diameter at breast height (dah) 632 in (81 cm) or more.

— Mature forests (west of the Cascade Crest): Stands where the largest roses are 80, 200 years old OR the species that make up the cancept have an average diameter (dah) exoceding 21 in (53 cm). Yes # Category 1 (No) Not a forested wotland for this section during most of the year in at least a portion of the lagoon (needs to be measured near the bottom) $Vc_F - Go to SC S.L \ / \ AGS NOT a wetand in a coastal lagoon$ SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and 1 ac?

Yes = Category II No = Category IV SC 6.1. Is the wedland 1.a.c or larger and scores an 8 or 9 for the habitat functions on the form (rates H,H,H or H,H,M for the three aspects of function)?

Yes = Caragory1 No = Go to SC 6.2 Yos = Category 1 No = Category II — Ocean Shores-Copalis: Lands west of SR 115 and SR 109

Yes — Go to SC 6.1 (No g not an interdunal wetland for rating Yes = Category | No - Go to SC 6.2 Is the wetland worst of the 1889 line (also called the Wostern Boundary of Upland Ownership or WBUO)? If you answer yes you will still need to rate the weldend based on its habitest functions.

— I have been consistent that means the following geographic areas:

— Long Board Peninkula: Lands wast of SR 103

— Grayland-Wostport: Lands west of SR 103 — The wetland lies in a depression adjacent to marino waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks

— The lagoon in which the wetland is located contains ponded water that is saline or brackish (> 0.5 ppt) Doas the wetland have at least 1 <u>contitueur, acre</u> of forest that meets one of these ortesta for the WA Department of Fish and Wildlife's forests as priority habitate? If you enswer YES you will still need to rate the wetland based on its functions. The wetland is rotatively undisturbed (has no diking, ditching, filling, cuitivaten, grazing), and has less
than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100).
 At loast X of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? SC6.2. Is the wetland 1 ac or larger, or is it in a mosale of wetlands that is 1 ac or larger? Category of weetand based on Special Characteristics
If you answered No for all types, enter "Not Applicable" on Summary Form SC 5.1. Does the wetland meet all of the following three conditions? mowed grassland. — The wetland is larger than $^1/_{10}$ ac (4350 ft²) SC 5.0. Wetlands in Coastal Lagoons SC 6.0. Interdunal Wetlands

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RATING SUMMARY – Western Washington

Name of wetland (or ID #): L-wJShvc = Date of site visit: S | | 2 2 | Rated by F yn NS L- Hunsuntained by Ecology? Yes No Date of training 20.5 HGM Class used for rating \$5.30 & Wetland has multiple HGM classes? Y N

OVERALL WETLAND CATEGORY (based on functions or special characteristics)

1. Category of wetland based on FUNCTIONS

Category I – Total score = 23 - 27

Category II – Total score = 20 - 22

Category III – Total score = 16 - 19

_Category IV - Total score = 9 - 15

Score for each function based on three ratings (order of ratings is not important)

2. Category based on SPECIAL CHARACTERISTICS of wetland

Wetland of High Conservation Value I I II Bog I I II Mature Forest I I I II Coastal Lagoon I II III IV None of the above	CHARACTERISTIC	CATEGORY
and of High Conzervation Value Ire Forest Srowth Forest tal Lagoon dunal of the above	Estuarine	п т
ire Forest Srowth Forest tal Lagoon dunal	Wedand of High Conservation Value	I
	Bog	_
	Mature Forest	I
	Old Growth Forest	-
	Coastal Lagoon	11 11
None of the above	Interdunal	и шпи
	None of the above	1

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Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of	To an Suproctions:
Cowardin plant classes	T
Hydroperleds	D1.4, H1.2
Location of outlet (can be added to map of hydroperiods)	D1.1, D4.1
Boundary of area within 150 ft of the wetland (can be added to another figure)	D22, D5.2
Map of the contributing basin	D 4.3, D 5.3
1 km Polygon: Area that extends 1 km from entire wetland edge - Including	H2.1, H2.2, H2.3
polygons for accessible habitat and undisturbed habitat	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D3.1, D3.2
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	033

Riverine Wetlands

tap of and an entrance of the self-weights with the maliference of the self-of-	To answer questions: Figure #	Fixure #
owardin plant classes	H11, H1,4	
ydroperiods	H12	
onded depressions	R 1,1	
oundary of area within 150 ft of the wetland (can be added to another figure)	R 2,4	
lant cover of trees, shrubs, and herbaceous plants	R1.2, R4.2	
Vidth of unit vs. width of stream (can be added to another figure)	R4.1	
dap of the contributing basin	R 2.2, R 2.3, R 5.2	
km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	
olygons for accessible habitat and undisturbed habitat		
green capture of map of 303(d) listed waters in basin (from Ecology website)	R3.1	¢
green capture of list of TMDLs for WRIA in which unit is found (from web)	R3.2, R3.3	

Lake Fringe Wetlands

98 H,H,H 78 H,H,M 78 H,H,L 78 H,H,L 68 H,M,L 68 M,M,M 68 M,M,M 81 M,L,L 31 M,L,L 31 M,L,L 31 M,L,L

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core Based on

Vap of the contract of the second sec	To answer questions:	Figure #
Jowardin plant classes	L11, L4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	1.1.2	
Soundary of area within 150 it of the wetland (can be added to another flaure) 1.2.2	1.2.2	
I km Polygon: Area that extends 1 km from entire wetland edgo - including	H 2.1, H 2.2, H 2.3	
oolygons for accessible habitat and undisturbed habitat		
icreen capture of map of 303(d) listed waters in basin (from Ecology website)	13.1, 13.2	
icreen capture of list of TMDLs for WRIA in which unit is found (from web)	1.3,3	

Slope Wetlands

Map of:	To answer questions: Figure #
Cowardin plant classes	H11, H1,4
Hydroperiods	H12
Plant cover of dense trees, shrubs, and herbaceous plants	\$1.3
Plant cover of dense, rigid trees, shrubs, and herbaceous plants	54.1
(can be added to figure above)	
Boundary of 150 ft buffer (can be added to another figure)	521,55.1
1 km Polygon: Area that extends 1 km from entire wetland edge - Including	H21, H22, H23
polygons for accessible habitat and undisturbed habitat	•
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	53.1, 53.2
Screen capture of 11st of TMDLs for WRIA in which unit is found (from web)	53.3

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HGM Classification of Wetlands in Western Washington

For questions 1-7, the criteria described must apply to the entire unit being rated

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1-7 apply, and go to Question 8.

Are the water levels in the entire unit usually controlled by tides except during floods?

(NO × go to 2

YES - the wetland class is Tidal Fringe - go to 1.1

1.1 Is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

NO - Saltwater Tidal Fringe (Estuarine)

If your wetland can be classified as a Freshwater Tidal Fringe use the forms for Riverine wetlands. If it is Saltwater Tidal Fringe It is an Estuarine wetland and is not scored. This method cannot be used to YES - Freshwater Tidal Fringe score functions for estuarine wetlands. The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit. ٨i

YES - The wetland class is Flats NO_{) go} to 3 "Yyour wetland can be classified as a Flats wetland, use the form for **Depressional** wetlands.

3. Does the entire wetland unit meet all of the following criteria?

The vegetated part of the wedand is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size;

At least 30% of the open water area is deeper than 6.6 ft (2 m).

YES - The wetland class is Lake Fringe (Lacustrine Fringe) NO Seo to 4

Does the entire wetland unit meet all of the following criteria?

____The wetland is on a slope (slope can be very gradual),
___The water flows through the wetland in one direction (unidirectional) and usually comes from

seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks, ___The water leaves the wedand without being impounded.

NO - go to 5

YES The wetland class is Slope

shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft NOTE: Surface water does not pond in those type of wetlands except occasionally in very small and

The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that Does the entire wetland unit meet all of the following criteria? ហ

The overbank flooding occurs at least once every 2 years. stream or river

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m

Wetland name or number_

NOTE: The Riverine unit can contain depressions that are filled with water when the river is not YES - The wetland class is Riverine NO - go to 6 flooding Is the entire wedand unit in a topographic depression in which water ponds, or is saturated to the surface, at some time during the year? This means that any outlet, if present, is higher than the interior of the wettand,

NO - go to 7

YES - The wetland class is Depressional

maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural is the entire wetland unit located in a very flat area with no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be

NO - go to 8

YES - The wetland class is Depressional

stream within a Depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small Your wetland unit seems to be difficult to classify and probably contains several different HGM wetland unit being scored. œί

is less than 1.0% of the unit; classify the wetland using the class that represents more than 90% of the more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 NOTE: Use this table only if the class that is recommended in the second column represents 10% or

HGM classes within the wetland unit being rated	HGM class to use in rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake Fringe	Lake Fringe
Depressional + Riverine along stream	Depressional
within boundary of depression	
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other	Treat as
class of freshwater wetland	ESTUARINE

lf you are still unable to determine which of the above criteria apply to your wetland, or if you have more than 2 HGM classes within a wetland boundary, classify the wetland as Depressional for the

Wetland name or number _____

te functions to impix ridin classes): re description that result reage. The herbaceods p nith: These are pol Cow ous does not prejude oqu Add the points	# 1 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	LAKE FRINGE WETLANDS	X
redin closses): te description that result reage. The herbacesod's purity. These are poli Cow ous obes not pfiliade agui	平18.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Water Quality Functions - Indicators that the site func	tions to improve water quality
redin closses): te description that result trage. The herbacepok port ous does not influde agu Add the points	Average width of plants along the lakeshore (use polygons of Cowardin dosses): Plants are more than 15 it (5 m) wide Plants are more than 15 it (5 m) wide and <53 it Plants are more than 16 it (5 m) wide and <53 it Plants are more than 16 it (5 m) wide and <54 it Plants are more than 16 it (2 m) wide and <56 it Plants are more than 6 it (2 m) wide and <56 it Plants are less than 6 it wide Characteristics of the plants in the weather it your estimate of coverage. The herbaccog's plants can be either the deminant form or as an understory in a shrub or forest community. These are pof cowardin classes, Area of cover is to the forewing the unit in patches. Herbaccous does not pfelude equatic bed. Cover of herbaccous plants is 3-20% of the vegetated area Cover of herbaccous plants is 3-1, of the vegetated area Cover of herbaccous plants is 3-1, of the vegetated area Cover of herbaccous plants is 3-1, of the vegetated area Cother plants that are not equals bed in 3-1, wegetated area Other plants that are not equals bed in 3-1, wegetated area Other plants that are not equals bed in 3-1, yespetated area Other plants that are not equals bed in 3-1, yespetated area Other plants that are not equals bed in 3-1, yespetated area Other plants that are not equals bed in 3-1, yespetated area Other plants that are not equals bed in 3-1, yespetated area Other plants that are not equals bed in 3-1, yespetated area Other plants that are not equals bed in 3-1, yespetated area Other plants that are not equals bed in 3-1, yespetated area Other plants that are not equals bed in 3-1, yespetated area Other plants that are not equals bed in 3-1, yespetated area Other plants that are not equals bed in 3-1, wegetated area Other plants that are not equals bed in 3-1, yespetated area Other plants that are not equals bed in 3-1, yespetated area Other plants that are not equals bed in 3-1, yespetated area Other plants that are not equals bed in 3-1, wegetated area Other plants the plants are not equals bed in 3-1, w	0. Does the site have the potential to improve water quality?	
to description that results and ages. The herbacepace of the serios for consulty. These are jeftude agus does not jeftude agus Add the points	Plants are more than 33 ft (10 m) wide Plants are more than 15 ft (10 m) wide and <33 ft Plants are more than 16 ft (2 m) wide and <33 ft Plants are more than 16 ft (2 m) wide and <36 ft Plants are more than 16 ft (2 m) wide and <36 ft Plants are more than 6 ft (2 m) wide and <36 ft Plants are more than 6 ft (2 m) wide and <36 ft Plants are more than 6 ft (2 m) wide and <36 ft Plants are more than 6 ft (2 m) wide and <36 ft Plants are more than 6 ft (2 m) wide and <36 ft Plants are more than 6 ft (2 m) wide and <36 ft Plants are more than 6 ft (2 m) wide and <36 ft Plants are more than 6 ft (2 m) wide and <36 ft Plants are more appropriate (3 m) wide and <36 ft Plants are more appropriate (3 m) wide and <36 ft Plants are more appropriate (3 m) wide and <36 ft Plants are more appropriate (3 m) wide and <36 ft Plants are more appropriate (3 m) wide and <36 ft Plants are more appropriate (3 m) wide and <36 ft Plants are more appropriate (3 m) wide and <36 ft Plants are more appropriate (3 m) wide and <36 ft Plants are more appropriate (3 m) wide and <36 ft Plants are more appropriate (3 m) wide and <36 ft Plants are more appropriate (3 m) wide are wide (3 m) wide and <36 ft Plants are more appropriate (3 m) wide are wide (3 m) wide and <36 ft Plants are more appropriate (3 m) wide are wide (3 m) wid	.1. Average width of plants along the lakeshore (use polygons of Cowardin cla	(505);
to description that results crass. The herbaccodis print. These are pot Cow our does not prifude agu.	Plants are more than 16 ft (5 m) wide and <33 ft Plants are more than 6 ft (2 m) wide and <33 ft Plants are more than 6 ft (2 m) wide and <16 ft Plants are more than 6 ft (1 m) wide and <16 ft Plants are more than 6 ft (1 m) wide and <16 ft Plants are loss than 6 ft wide On the plants in the westand: Choose the appropriate description that results fn the highest points, and do not include any open water in your estimate of cewerage. The herbaccop's plants can be either the deminant form or as an unadorstory in a shrub or forest community. These are post Cowardin classes. Area of cover is total cover in the unit, but it can be im patches. Herbaccous does not justice or got Cowardin classes. Area of cover of herbaccous plants is >20 ft to vegetated area Cover of herbaccous plants is >2 ft, of the vegetated area Cover of herbaccous plants is >2 ft unit can be implained area Cover of herbaccous plants is >2 ft unit can be implained area Cover of herbaccous plants is >2 ft unit can be implained area Cover of herbaccous plants is >2 ft unit can be implained area Cover of herbaccous plants is >2 ft unit can be implained area Cover of herbaccous plants are not aquatice bed in >2 ft unit plants that are not aquatice bed in >2 ft unit the unit plants that are not aquatice bed in >2 ft unit the unit plants that are not aquatice per in the unit plants in the plants and open water cover >2 ft of the unit plants in the plants and open water cover >2 ft of the unit plants in the plants and open water cover >2 ft of the unit plants in the plants and open water cover >2 ft of the unit plants in the plants and open water cover >2 ft of the unit plants in the plants and open water cover >2 ft of the unit plants in the plants and open water cover >2 ft of the unit plants and open water cover >2 ft of the unit plants and open water cover >2 ft of the unit plants and open water cover >2 ft of the unit plants and open water cover >2 ft of the unit plants and open water cover >2 ft of the unit plants and open water cover	Plants are more than 33 ft (10 m) wide	
to description that result transcription that result transcription that result transcription that result transcription that the point transcription that the points.	Plants are more than 6 ft (2 m) wide and <16 ft Plants are loss than 6 ft wide 2. Characteristics of the plants in the westlant: Choose the appropriate description that results' in the highest points = 0 2. Characteristics of the plants in the westlant: Choose the appropriate description that results' in the highest points, and do not include any open water in your estimate of coverage. The herbaccook plants can be either the deminant form or as an understory in a shub or forest community. These are post Cowordin classes. Area of cover in the unit, but it can be in practice. Herbaccook does not yiellude equatic back. Cover of herbaccous plants is >2/2, of the vegetated area Cover of herbaccous plants is >1/2, of the vegetated area Cover of herbaccous plants is >1/2, of the vegetated area Cover of herbaccous plants bed > 1/2, yugetated area Other plants that are not aquatic bed in >1/2, yugetated area Other plants that are not aquatic bed in >1/2, yugetated area Other plants that are not aquatic bed in >1/2, yugetated area Other plants that are not aquatic bed in >1/2, yugetated area Other plants and open water cover > 2/2, of the unit	Plants are more than 16 ft (5 m) wide and <33 ft	e suijoo
to description that result result result result result result result. The her are plot Cow out does not influde agui	Plants are less than 6 ft wide 2. Characteristics of the blants in the wetland: Choose the appropriate description that results' in the highest points, and do not include any open water! In your estimate of coverage. The herbaccog's plants can be either the dominant form or as an understory in a shrub or forest community. These are pof Cowardin classes, Area of cover of the cover in the unit, but it can be in patches. Herbaccous does not pland oquatic bed. Cover of herbaccous plants is 29% of the vegetated area Cover of herbaccous plants is 2½, of the vegetated area Other plants that en or aquatic bed in 2½, unit that the plants and open water cover 2½, of the unit Aquatic bed plants and open water cover 2½, of the unit	Plants are more than 6 ft (2 m) wide and <16 ft	Door a
to description that result transports for the herbacepass printly. These are pot Cow our does not jeffude oqui	2. Characteristics of the plants in the wetland: Choose the appropriate description that resulted the highest points, and do not include any open water in your estimate of caverage. The herbaccops plants can be either the deninant form or as an understory in a shade or forcest community. These are post Cowardin classes, Area of sover is total cover in the unit, but it can be in partices. Herbaccous does not jediude equatic bed. Cover of inchasceous plants is >90% of the vegetated area Cover of herbaccous plants is >1, of the vegetated area Cover of herbaccous plants is >1, of the vegetated area Cover of herbaccous plants is >1, of the vegetated area Cover of herbaccous plants is >1, of the vegetated area Cover of herbaccous plants is >1, of the vegetated area Cover of herbaccous plants is >1, of the vegetated area Cover of herbaccous plants is >1, of the vegetated area Cover of herbaccous plants and open water cover > 2, of the unit	Plants are less than 6 ft wide	O matting of
range. The herbaccods purish. The herbaccods purish. These are pot Cow our doces not jeffude agui	points, and do not include any open water in your estimate of coverage. The herbaccops plants can be either the deminant form or as an understory in a shade of reforest community. These are post Cowardin classes, Area of cover is stock cover in the unit, but it can be in patches. Herbaccous does not include a questic education of the control cover of herbaccous plants is >90% of the vegetated area. Cover of herbaccous plants is >1/3 of the vegetated area points = 3 points = 3	2. Characteristics of the plants in the wetland: Choose the appropriate descr	ption that results in the highest
Add the points	rer is total cover in the unit but I can be in patches. Herbaccous does not yellude aquatic bed, of herbaccous plants is 290% of the vegetated area of herbaccous plants is 2 ³ / ₂ of the vegetated area of herbaccous plants is 2 ³ / ₂ of the vegetated area plants that are not aquatic bed in 2 ³ / ₂ unit plants that are not aquatic bed in 2 ³ / ₂ vegetated area clear that are not aquatic cover 2 ³ / ₂ of the unit	points, and do not include any open water in your estimate of coverage. The dominant form or as an understory in a shrub or forest community. The	he herbaceous plants can be either
Add the points	of horbaceous plants is >90% of the vegetated area of herbaceous plants is >½, of the vegetated area of herbaceous plants is >½, of the vegetated area herbaceous plants is >½, of we vegetated area plants that are not equate bed > ½, unt plants that are not equate bed in > ½, vegetated area clear that are not equate cover > ½, of the unit	of cover is total cover in the unit, but it can be in patches. Herbaccous does	not include aguatic bed.
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Add the points	of herbacoous plants is 2 ¹ / ₂ of the vegetated area plants that are not aquate bed 2 ¹ / ₂ unit plants that are not aquate bed 2 ¹ / ₂ furth plants that are not aquate bed in 2 ¹ / ₂ wegetated area plants that are not aquate bed in 2 ¹ / ₂ wegetated area die bed plants and open water cover 2 ² / ₂ of the unit	Cover of herbaceous plants is >2/3 of the vegetated area	points = 4
Add the points	plants that are not aquatic bed > $\frac{7}{3}$, unit plants that are not aquatic bed in > $\frac{1}{3}$, vegetated area it bed plants and open water cover > $\frac{7}{3}$, of the unit	Cover of herbaccous plants is > 1/3 of the vegetated area	E a Sulod
Add the points	plants that are not aquatic bed in > $\frac{1}{2}$, vegetated area it bed plants and open water cover > $\frac{1}{2}$, of the unit	Other plants that are not aquatic bed > 7/3 unit	points = 3
Add the points	ic bed plants and open water cover > 2/1 of the unit	Other plants that are not aquatic bed in $> \frac{1}{3}$, vegetated area	points = 1
Add the points		Aquatic bed plants and open water cover > 2/1 of the unit	points = 0
		al for L1	Add the points in the boxes above
	Rating of Site Potential If score is: 8-12 m 4-7 m 0-3 m, Surged the ration on the first page	Ing of Site Potential If score is: 8-12 m H 4-7 m M 0-3 m L	Secord the ration on the fact page

L 2.0. Does the landscape have the potential to support the water quality function of the site?	
12.1. is the lake used by power boats?	
L 2.2. is > 10% of the area within 150 ft of wetland unit on the upland side in land uses that generate pollutants?	
Yes # 1 No # 0	
L 2.3. Does the lake have problems with algal blooms or excessive plant growth such as milfoli? Yes # 1 No # 0	
Total for L.2 Add the polnts in the boxes above	
Rating of Landscape Potential: If score is: _2 or 3 = H _ 1 = M _ 0 = L	he first page

L3.1. is the lake of the 303(d) list of degraded aquatic resources? Yes = 1 No = 0 L3.2. is the lake/d is albebasin where water quality is an issue fat least one animite recourse in the harde is an en-	
, is the lakeof a sub-basin where water quality is an issue (at least one animal recourse in the basin is an the	
303(d) st)? Yes = 1 No = 0	
L 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? Answer YES if there is a TMDL for the lake or basin in which the unit is found.	
Total for L3 Add the points in the boxes above	

Wetland name or number

L40. Does the site have the potential to reduce shoreline erosion?	HOROTS SHIP WITE STANSAGE
L4.1. Distance along share and average width of Cowardin daxees along the lakeshore (do not include Aquatic bed); Choose the highest scoring description that matches conditions in the wedend.	not Include Aquatic bed);
> % of distance is Scrub-shrub or Forested at least 33 ft (10 m) wide	points ≈ 6
> % of distance is Scrub-shrub or Forested at least 6 ft (2 m) wide	points = 4
> ¼ distance is Scrub-shrub or Forested at least 33 ft (10 m) wide	Doints # 4
Plants are at least 6 (t (2 m) wide (any typo oxcopt Aquatic bod)	points = 2
Plants are less than 6 ft (2 m) wide (any type except Aquatic bed)	points = 0
Rating of Site Potential: If score is: 6 # M G-5 # L	Record the rating on the first page
L 5.0. Does the landscape have the potential to support the jyydrologic functions of the site?	fthesho?
L5.1. Is the lake used by power boats with more than 10 hp?	Yess 1 Now 0
L5.2. is the fetch on the lake side of the unit at least 1 mile in distance?	Yes 1 No = 0
Total for L.5 Add th	Add the points in the boxes above
Rating of Landscape Potential If scoro is: ZaH IAM OrL	Record the rating on the first page
1.6.0. Are the hydrologic functions provided by the site valuable to society?	
L6.1. Are there resources plong the shore that can be impacted by crosion? If more than one resource is presont, choose the one with the highest score.	ne resource is present,
There are hyphan structures or old growth/mature forests within 25 ft of OHWIM of the shore in the unit	the shore in the unit
	points = 2
Therpaire nature trails or other paths and recreational activities within 25 ft of OHWM	M points = 1
Other resources that could be impacted by erosion	points = 1
There are no resources that can be impacted by erosion along the shores of the unit	Doints = 0

NOTES and FIELD OBSERVATIONS:

SLOPE WELLANDS Water Quality Functions - Indicators that the site functions to improve water quality	prove water quality	
S.1.0. Does the site have the potential to improve water quality?		7.1817.611
\$1.1. Characteristics of the average slope of the wetland: (a 1% slope has a 1 t vertical drop in clevation for every 100 f of horizontal distance)	elevation for every	
Slape is 1% or less	points = 3	
Slape (5 > 1%-2%	points # 2	eren.
Slope is > 2%-5%	points £1	
Slope is greater than 5%	points = 0	
\$1.2. The soil 2 in bolow the surface for duff layer) is true clay or true organic (use NRCS definitions); Yes = 3 Note 0	ions): Yes = 3 No/=0)	C
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollutants:		
Choose the points appropriate for the description that bost fits the plants in the wetland. Danse means you	. Dense means you	
have trouble seeing the soil surface (>75% cover), and uncut means not grazed or mowed and plants are higher	l and plants are higher	
than 6 in.	(
Dense, uncut, herbaceous plants > 90% of the wotland area	points 46	,
Dense, uncut, herbaceous plants > ½ of area) saluto e	_
Dense, woody, plants > ½ of area	points = 2	٥
Dense, uncut, horbaccous plants $> \%$ of area	points = 1	
Does not meet any of the criteria above for plants	points ≈ 0	
Total for 5.1 Add the poi	Add the points in the boxes above	4
Batha of the Deportal Hecorole: 12 H F.11 aM (45 H).	Canada Cate on the same and bearing	

Record the rating on the first page

0

Hydrologic Functions - Indicators that the site functions to reduce flooding and stream erosion 5.4.0. Does the site have the potential to reduce flooding and stream erosion?

SLOPE WETLANDS

Wetland name or number

5.4.1. Characteristics of plants that reduce the velocity of surface flows during storms: Choose the points appropriate for the description that best fits conditions in the vertand. Stems of plants should be thick enough (usually > 1/a hi), or dense enough, to remain event during surface flows.

Denne, uncut, fight plants cover > 90% of the grea of the wetland
All other conditions.

Record the rating on the first page

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S.S.L. Is more than 25% of the area within 150 ft upslope of woxland in land uses or cover that generate excess surface runoff?

\$ 5.0. Does the landscape have the potential to support the hydrologic functions of the site?

Rating of Site Potential If score is: 1 m M __ 0 m L

S 2,0. Does the landscape have the potential to support the water quality function of the sito?

Record the rating on the first page Ø 52.2. Are there other sources of pollutants coming into the wedand that are not listed in question 52.17 No 60.7 No 60.7Add the points in the boxes above 5.2.1. is > 10% of the area within 150 ft on the uphili side of the wetland in land uses that generate pollutyarts Other sources Total for S 2

Record the rating on the first page

Rating of Value If score is: 24 m 1 m M 0 m L

Total for 56

NOTES and FIELD OBSERVATIONS:

Add the points in the boxes above

0

No flooding problems anywhere downstream
No flooding problems anywhere downstream
S.E.z. Has the site been identified as important for flood storage or flood conveyance in a regional flood centrol plan?
Yes = 2. No (6)

S.6.1. Distance to the nearest areas downstream that have flooding problems:

The sub-ball innediately down-gradient of site has flooding problems that result in damage to human or natural resources (e.g., houses or salmon redds)

Surface flooding problems are in a sub-basin farther down-gradient

point of point of the sub-basin farther down-gradient

S 6.0, Are the hydrologic functions provided by the site valuable to society?

Rating of Landscape Potential if score is: 1 = M W 0 = L

points = 2

Rating of Landscape Potential If score is: 1/1-2 = M ____0 = L

Record the rating on the first page 0 S31. Does the wedand discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the Yes = 1. No CD 5.3.2. Is the westland in a basin or sub-basin where water quality is an issue? At least one equalic resource $|\hat{q}|$ the basin is on the 303(0) list. Yes $d_{\rm s} = 0$ 53.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? Proyeer YES if there is a TMDL for the basin in which unit is found.

Ves = (2.30 = 0.3)Add the points in the boxes above S 3.0. Is the water quality improvement provided by the site valuable to society? Rating of Value If score is: V 2-4 m H 1 m M 0 = L Total for S3

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Wetland Rating System for Wostern WA: 2014 Update Rating Form – Effective January 1, 2015

Wetland Rating System for Western WA: 2014 Update Rating Form – Effective January 1, 2015

0 0 H.1.1. Structure of plant community: indicators are Cowardin classes and strata within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 parthes may be combined for each class to meet the threshold of K ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.

Astructures or more: points = 4 Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian miljoil, reed canarygrass, purple loosestrife, Canadian thistle 2 structures: points = 1-1 structure: points = 0 4 or more types present points = 3
3 types present points < 2
2 types present points < 2 2 points 2 points Deddo from the diagrams below whether interspersion among Cowardin plants classes (described in H.1.1), or the classes and unvegetated areas (can include open water or muditats) is high, moderate, low, or none. If you have four or more plant classes or three classes and open water, the roting is always high, 1 type present points = 0 3 structures; points = 2 Chock the types of water regimes (hydroperiods) present within the weeland. The water regime has to cover more than 10% of the wetland or % as to count (see text for descriptions of hydroperiods). points = 0 If the unit has a Forestad class, check if.
The Forestad class has 3 out of 5 stats (canopy, sub-canopy, shubs, herbacous, moss/ground-cover)
that each cover 20% within the Forested polygon Moderate = 2 points These questions apply to wetlands of all HGM classes. HABITAT FUNCTIONS - Indicators that site functions to provide Important habitat Count the number of plant species in the wetland that cover at least $10\,\mathrm{H}^2$ Permanently flowing stream or river in, or adjacent to, the wetland Seasonally flowing stream in, or adjacent to, the wetland H 1.0. Does the site have the potential to provide habitat? Cmcrgent Scrub-shrub (areas where shrubs have > 30% cover) Forested (areas where trees have > 30% cover) Low # 1 point Permanently flooded or inundated Secusionally flooded or inundated Seasonally flooded or inundated Lake Fringe wetland Freshwater tidal wetland 5 - 19 species If you counted: > 19 species Lake Fringe wetland H 1.3. Richness of plant species H 1.4. Interspension of habitats None Opoints All three diagrams are KIGH # 3points

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Wetland name or number

Chark the habitat features that are present in the wedand. The number of checks is the number of nature	
Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long). Standing snags (dbh > 4 in) within the wetland	
Undercut banks are present for at least 6.6 ft (2 m) and/or overhanging plants extends at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m)	
Stable steep banks of fine material that might be used by beaver or muskrat for denning. (> 30 degree slope) OR signs of rocent beaver activity are present (out shrubs or trees that have not yet weathered	N
where wood is exposed)	1
permanently or zeasonally inundated (structures for egg-laying by amphibians)	
V Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata)	
Total for H 1 Add the points in the boxes above	V
Rating of Site Potential If scare is: 15-18 # H 7-14 # M to 0-6 # L Record the rating on the first page	c first pag
H 2.0. Does the landscape have the potential to support the habitat functions of the site?	
habitat (Include only habitat that directly abuts wetland unit),	
Colculate: % undisturbed habitat + [(% moderate and low intensity land uses)/2] = 2 %	
\ S)	
	,
< 10% of 1 km Polygon	
T	-
ed habitat > 50% of Polygon > A	
្) រ	د و
Undisturbed habitat 10-50% and > 3 patches	
ivgon	
/- \	
> 50% of 1 km Polygon is high intensity land use	1
Add the relate is the Level - Level	b
- }	
H.3.0. is the habitat provided by the site valuable to society?	
H3.1. Does the site provide habitat for species valued in laws, regulations, or policies? Choose only the highest score	
that applies to the wetland being rated.	
Sugar means Alvi or the tallowing criteria; points = 2 /	
— it provides habitat for Threatened or Endancered concle (now plant or animal or the contract of the contract	ر
It is mapped as a location for an individual WOFW priority species)
— It is a Worland of High Conservation Value as determined by the Department of Natural Resources — It has been categorized as an immediate backet in a food and one of the conservation o	
Shoreline Master Plan, or in a watershed plan	
Site has 1 or 2 priority habitats (listed on next page) within 100 m	
wof the crite	
Rating of Value if score is 2 = H _ 1 = M _ 0 = L	first page
Wetland Rating System for Western Wis 2014 Hadan	

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WDFW Priority Habitats

Priority habitats listed by WDFW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found. If Washington Obsertment of Fish and Wildlife 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp. http://wdfw.xa.co/publications/00165/wdfw00165.pdf or access the list from here: http://wdfw.xa.co/conservations.pdf.

Count how many of the following priority habitats are within 330 ft (100 m) of the wetland unit: NOTE: This question is

--- Aspen Stands: Pure or mixed stands of aspen greater than 1 ac (0.4 ha).

independent of the land use between the wetland unit and the priority habitat.

- Blodiversity Areas and Corridors: Areas of habitat that are relatively important to various species of native fish and
 wildlife (full descriptions in WDFW PHS report).
- --- Herbaccous Balds: Variable size patches of grass and forbs on shallow solls over bedrock
- Old-growth/Maturo forests: <u>Old-growth wost of Casande grost</u> Sands of at least 2 tree species, forming a multi-layered canopy with occasional small openings; with at least 8 troes/ac (20 trees/ha) > 22 in (81 cm) debt or > 200 years of ago, <u>Maturo Engrest</u> Stands with werego diameteries seconding 21 in (53 cm) debt; crown cover may be loss than 100%; decay, decadence, numbers of smaps, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Casande crest.
- Opagon White Oak: Woodland stands of pure oak or oak/contior associations where canopy coverage of the oak Komponent is important (juli descriptions in WDFW PHS report p. 188 see web link abour).
- Riparian: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.
- Westside Prairies: Herbacoous, non-forested plant communites that can either take the form of a dry prairie or a wet Arairie (Juli descriptions in WDFW PHS report p. 161 see web link above).
- instream: The combination of physical, blological, and chemical processes and conditions that interact to provide functional life history requirements for Instream fish and wildlife resources.
- Nearshore: Relatively undisturbed noarshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and Puget Sound Nearshore, (full descriptions of habitats and the definition of relatively undisturbed are in WDFW report see web link on previous page).
- Caves: A naturally occurring cavity, rocess, void, or system of interconnected passages under the earth in soils, rock, ico, or other geological formations and is large enough to contain a human.
- Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.
- Talus: Homogenous areas of rock rubble ranging in average size 0.5 6.5 ft (0.15 2.0 m), composed of basait, andosite, find/or sedimentary rock Including riprap slides and mine milings. May be associated with ellifs.
- Snags and Logs: Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife, Priority snags have a diameter at breast height of > 20 in (51 cm) in western Washington and are > 65 ft [2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.

Note: All vogetated wetlands are by definition a priority habitat but are not included in this list because they are addressed

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5

Wetland name or number __

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type Check of any criteria that apply to the wetland, Circle the cotegory when the appropriate criteria ane met.	Category
SC 1.0. Estuaring wetlands Does the wetland most the following criteria for Estuarine wedands?	
,	
- With a salinity greater than 0.5 ppt Yes -Go to SC 1.1 / Not an estuarine wetland	
SC 1.1. Is the wetland within a National Wildlife Refuge, National Park, National Eduary Reserve, Natural Area Presarve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151? Yes = Category1 No - Go to SC 1.2	Cat.
SC1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?	
— The wetland is rolatively undisturbed (has no diking, ditching, filling, cuitivation, grazing, and has less than 10% cover of non-native clant species. If non-native species are Seartha, see page 25)	- Cotr
- At least X of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-	
he following features: tidal channels, depressions with	≓ tt
contiguous freshwater wetlands.	
SC 2.0. Wetlands of High Conservation Value (WHCV)	
SC.2.1. Has the WA Department of Natural Resources updated their website to Include the list of Watlands of High Concentration Wallian?	-t
on the WDNR database as a Wetland of High Conservation Value?	
Yes a Category 1 No a Not a WHCV	
SC 2.3. Is the wetland in a Section/ Lownship/Range that contains a Ivatural meritage wetuland: http://www.ldn.wa.pov/nhp/refdesk/datasearch/wnhpwcelands.pdf	
Yes - Contact WNHP/WDNR and go to SC 2.4 No = Not a WHCV	
SC 2.4, Has WDNR identified the wetland within the 5/1/R as a Wetland of High Conservation Value and listed it on their website? No = Not a WHCV	
the state of the s	
Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? Use the key	
below. If you answer YES you will still need to rate the wetland based on its functions.	
SC 3.1. Does an area within the wetland unit have organic soil norizons, clund peats or much, unit compose to in or more of the first 32 in of the soil profile? Yes – Go to SC 3.3 No – Go to SC 3.2	
SC3.2. Does an area within the wetland unit have organic soils, either peats or mucks, that are less than 16 in deep	
over badrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or	
pond? Yes - Go to SC 3.3 No # Is not a bog	
more than 70% cover	
cover of plant species listed in Table 4? NOTE: Many as upported in the understand was substitute that criterian by	
measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the	
plant species in Table 4 are present, the wetland is a bog.	ភី
SC 3.4. is an area with peats or mucks forested (> 30% covor) with Sitka spruce, subalpino fit, western red cedar,	
western hemlock, lodgspole pine, quaking aspon, Engelmann spruce, or western white pine, AND any of the	
species (or combination of species) listed in Table 4 provide more than 30% of the Cave of	

SC 4.0. Forested Wethands Does the wethand have at least 1, <u>continuous ares</u> of forest that meets one of these criteria for the WA Department of Fish and Wildliffes forests as priority habitate? If you onswer YES you will still need to rate the wethen dozed on Its functions. — Old-growth forest view of Cascado creat]: Stands of at least two tree species, forming a multi-layered anopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at least 200 years of age OR have a diameter at breast-height (abit) of 3.0 in [8 arm] or more. — Mature forests (west of the Cascado Creat); Stands where the largest trees are 80-200 years old OR the species that make up the canopy have an average diameter (dah) occeeding 21 in (53 cm). ∀es ≡ Category I (No) Not a forested wetland for this section	Gt
SC 5.0. Wetlands in Coastal Lagoons Dock the wetland meets all of the following criteria of a wetland in a coastal lagoon? — The wetland lifes in a depression adjacent to marrier waters that is wholly or partially separated from marrine waters by sandbanks, gravel banks, shingle, or loss frequently, rocks	
— The lagonn in which the wetland is located contains pended water that is saline or brackish (> 0.5 ppt) during most of the year in at least a partion of the lagoon interests to most used near the bottom) SC 5.1. Does the wetland most all of the following the mondations?	ŧ
 The weetland is relatively undisturbed (has no diking, ditching, filling, outivation, grazing), and has loss than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). At least X of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland. The wetland is larger than ¹/_{X0} ac (4350 ft²). 	Cot. 11
Yes = Category! No = Category!	
SC 6.0. Interdunal Wetbands Is the westland wear of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? If you answer yes you will still need to rate the wetband based on its habitar functions. In practical terms that means the following geographic areas: — Long Boach Peninsula: Lands weat of SR 103	
— Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 Yes - Go to SC 6.1 / No. not an interdunal weetland for rating	ē
SC 6.1. Is the wetland 1 as or larger and scores an 8 or 9 for the habitat functions on the form (rates H,H,H or H,H,M for the three aspects of function)? SC 6.2. Is the wetland 1 as or larger, or is it in a mosale of work-and-thank thank the second second and the second se	25 25 25 25 25 25 25 25 25 25 25 25 25 2
SC 6.3. Is the unit between 0.1 and 1.ac, or is it in a mosaic of wetlands that is between 0.1 and 1.ac? Yes = Category II No = Category IV Yes = Category II No = Category IV	g gt E
Category of wetland based on Special Characteristics If you answered No for all types, enter "Not Applicable" on Summary Form	\$

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Wetland Rating System for Western WA: 2014 Update Rating Form – Effective January 1, 2015

20.5 Date of site visit: 5 4 22 Trained by Ecology? Yes No Date of training RATING SUMMARY – Western Washington Wetiand has multiple HGM classes?___Y_ Name of wetland (or ID #): - NALLNN&C HGM Class used for rating

NOTE: Form is not complete without the figures requested (figures can be combined). Source of base aerial photo/map

OVERALL WETLAND CATEGORY (based on functions or special characteristics)

1. Category of wetland based on FUNCTIONS

_Category III ~ Total score = 16 - 19 Category II - Total score = 20 - 22 _Category IV - Total score = 9 - 15 _Category 1-Total score = 23 - 27

Score for each function based on three rathings (order of ratings is not important)

FUNCTION	3	improv ater Qu	ing	-	ydr	/drologic	္		Habitat	34	
					ŝ	t)	do a	Circle the appropriate	ate r	ğ	
Site Potential	x	<u>></u>	_	Ξ	(2)	2	_	Ι.	Σ	Э	
Landscape Potential	x(3	يـ	I	(2)	9		x,	Σ	Ь	
Value	$_{\rm x}$	Σ		Ξ	(2)			(Ξ)	Σ		TOTAL
Score Based on Ratings		4			l 🔊			3,	١.		130

M,M,M,M = 6

5 # H,L,L 5 # M,M,L 4 = M,L,L 3 = L,L,L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	II I
Wetland of High Conservation Value	ı
Bog	Į
Mature Forest	=
Old Growth Forest	I
Coastal Lagoon	пп
Interdunal	м шпі
None of the abovo	7

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Maps and figures required to answer questions correctly for Western Washington

Wetland name or number_

Depressional Wetlands

Mapot	To answer questions: Figure #
Cowardin plant classes	D13, H1.1, H1.4
Hydroperlods	D1.4, H1.2
Location of outlet (can be added to map of hydroperiods)	D 1.1, D 4.1
Boundary of area within 150 ft of the wotland (can be added to another figure) D 2.2, D 5.2	02.2, 05.2
Map of the contributing basin	04.3, 05.3
1 km Polygon: Area that extends 1 km from entire wotland edge - Including	H21, H22, H23
polygons for accessible habitat and undisturbed habitat	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	03.1,03.2
Servent martine of list of That is far 18/01A in which we're to found the	44.4

Riverine Wetlands

Map off: 10 to the second of t	To answer questions: Sterres #	Jones #
Cowardin plant classes	H11.H14	
Hydroperiods	H1.2	
Ponded depressions	81.1	
Boundary of area within 150 ft of the wetland (can be added to another flaure)	82.4	
Plant cover of trees, shrubs, and herbaceous plants	R1.2, R4.2	
Width of unit vs. width of stream (can be added to another figure)	84.1	
Map of the contributing basin	R22, R23, R5.2	Γ
1 km Polygon: Area that extends 1 km from entire wetland edge - Including	H21, H22, H23	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R3.1	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	R3,2, R3.3	

Lake Fringe Wetlands

Map of:	To answer questions: Figure #	_
Cowardin plant classes	L1.1, L4.1, H1.1, H1.4	T
Plant cover of trees, shrubs, and herbaceous plants	١٦.2	$\overline{}$
Boundary of area within 150 ft of the wetland (can be added to another flaure)	12.2	T -
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	т
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website) [13.1, L3.2	13.1,13.2	_
Scroen capture of list of TMDLs for WRIA in which unit is found (from web)	L3,3	_
		1

Slope Wetlands

Map of the second secon	To answer questions: Figure #
Cowardin plant classes	H 1,1, H 1,4
Hydroperlods	H12
Plant cover of dense trees, shrubs, and herbaceous plants	51.3
Plant cover of dense, rigid trees, shrubs, and herbaceous plants	54.1
(can be added to figure above)	
Boundary of 150 ft buffer (can be added to another figure)	\$21,55,1
1 km Polygon: Area that extends 1 km from entire wetland edge - Including	H21, H22, H2,3
polygons for accessible habitat and undisturbed habitat	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	53.1, 53,2
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	53.3



HGM Classification of Wetlands in Western Washington

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in For questions 1-7, the criteria described must apply to the entire unit being rated questions 1-7 apply, and go to Question 8.

Are the water levels in the entire unit usually controlled by tides except during floods?

, NO/ go to 2

YES - the wetland class is Tidal Fringe - go to 1.1

1.1 Is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

NO - Saltwater Tidal Fringe (Estuarine)

If your wetland can be classified as a Freshwater Tidal Fringe use the forms for Riverine wetlands. If it is Salewater Tidal Fringe it is an Estuarine wetland and is not scored. This method cannot be used to YES - Freshwater Tidal Fringe score functions for estuarine wetlands The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit

NO -20 to 3

YES - The wetland class is Flats Afgour wetland can be classified as a Flats wetland, use the form for Depressional wetlands

3. Does the entire wetland unit meet all of the following criteria?

The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size;

It least 30% of the open water area is deeper than 6.6 ft (2 m).

YES - The wetland class is Lake Fringe (Lacustrine Fringe)

Does the entire wetland unit meet all of the following criteria?

The wetland is on a slope (slope can be very graduaf),

The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks, The water leaves the wetland without being impounded.

shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft NOTE: Surface water does not pond in these type of wetlands except occasionally in very small and NO / go to 5 deep).

YES - The wetland class is Slope

5. Does the entire wetland unit meet all of the following criteria?

___The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river

The overbank flooding occurs at least once every 2 years.

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Netland name or number

NOL go to 6 YES – The wetland class is **Riverine** NOTE: The Riverine unit can contain depressions that are filled with water when the river is not flooding

surface, at some time during the year? This means that any outlet, if present, is higher than the interior Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the of the wetland. ø

NO - go to 7

YES - The wetland class is Depressional

maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural is the entire wetland unit located in a very flat area with no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be .∵

NO - go to 8

YES - The wedand class is Depressional

classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rading system if you have several HGM classes present within the Your wetland unit seems to be difficult to classify and probably contains several different HGM wetland unit being scored. ωi

NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

HGM classes within the wetland unit	HGM class to
being rated	use in rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake Fringe	Lake Fringe
Depressional + Riverine along stream	Depressional
within boundary of depression	
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Ríverine
Salt Water Tida! Fringe and any other	Treatas
class of freshwater wetland	ESTUARINE

If you are still unable to determine which of the above criteria apply to your wetland, or if you have more than 2 HGM classes within a wetland boundary, classify the wetland as Depressional for the

DEPRESSIONAL AND FLATS WETLANDS

N M Ţ points # 2 Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 1.

Wetland is a flat degression (QUESTION 7 on key), whose outlet is a pormanently flowing ditch. points = 1.

D 12. The sell 2 in below the surface for duff layer! is true clay or true organic (use NRCS definitions) yes = 4. No 60 D 1.4. IDE SOIL of the street name of the control o Wedand has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. Pophra 62. Wedand has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. Points 6. Add the points in the boxes above Water Quality Functions - Indicators that the site functions to improve water quality points = 1 points = 0 points = 3 points = 0 Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet) This is the area that is ponded for at least 2 months. See description in manual. D 1.0. Does the site have the potential to improve water quality? D 1.1. Characteristics of surface water outflows from the wetland: Wedand has persistent, ungrazed, plants > 1 /10 of area Wedand has persistent, ungrazed plants > 1 /10 of area Wedand has persistent, ungrazed plants < 1 /10 of area Area seasonally ponded is > 1/2 total area of wetland Area seasonally ponded is > 1/4 total area of wetland Area seasonally ponded is < 1/2 total area of wetland D 1.4. Characteristics of seasonal ponding or Inu Total for D 1

Record the rating on the first page Rating of Site Potential If score is: 12-16 = H 2 6-11 = M 0-5 = L

0 Ø D 2.3. Are there septic systems within 2011 to the wetland that are not listed in questions D 2.1-D 2.3?

D 2.4. Are thore other sources of pollutants coming into the wetland that are not listed in questions D 2.1-D 2.3?

Nos # 1 Nop 0 Yes = 1 No/60 Add the points in the boxes above Yes(I No # 0 D 2.0. Does the landscape have the potential to support the water quality function of the site? D 2.2. is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? D 2.1. Does the wotland unit receive stormwater discharges? D 2.3. Are there septic systems within 250 ft of the wotland? Total for D 2

Record the rating on the first page Rating of Landscape Potential If score is: 3 or 4 " H / Lor 2 = M 0 = 1

4) Add the points in the boxes above D 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list?

Yes +1 No £9
D 3.2. Is the wetland in a basin or sub-basin where an aquate resource is an the 303(d) list?

Yes -1 No = 0 D 3.0, is the water quality improvement provided by the site valuable to society? Total for D 3

Record the rating on the first page Rating of Value If score is: 1/2-4 = H 1= M 0 = L Rating of Value if score is: 2-4 ** H LI = M On L

Wetland name or number

<u>DEPRESSIONAL AND FLATS WETLANDS</u> Hydrologic Functions - indicators that the site functions to reduce flooding and stream degradation	Š
D 4.0. Does the alte have the potential to reduce flooding and erosion?	
D 4.1. Characteristics of surface, water outflows from the westland: Wethand is a depression or flat depression with no surface water leaving it (no outlet) Wethand has an intermitentially flowing stream or differ). OR highly constricted permanently flowing outletpoints(2) Wethand is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing district points = 1 Wethand has an unconstricted, or slightly constricted, surface outlet that is pornanently flowing points = 0	N
D 4.2. <u>Doreth of storage during wet periods;</u> Estimate the height of panding above the bottom of the outlet. For wetlands with no outlet, pressure from the surface of permanent water or if dry, the deepest part. Marks of pending are 3 ft or mare above the surface or bottom of outlet. Marks of pending between 2 ft from surface or bottom of outlet. Marks are at loast 0.5 ft to < 3 ft from surface or bottom of outlet. The wetland is a "neadward" wetland. The wetland is a "neadward" wetland. Wetland is the turk has small dependent on the surface that trap water points solve. Marks of pending less than 0.5 ft (6 in).	0
D 4.3. <u>Contributions of the wenter to the vectores in the watercheory</u> Estimate the ratio of the area of upstream basin contribution surface water to the vectoral to the area of the wetland unit itself. The area of the basin is fat to a 100 times the area of the unit the area of the basin is 10 to 100 times the area of the unit The area of the basin is 10 to 100 times the area of the unit The area of the basin is note than 100 times the area of the unit Entire wedand is in the Flats class.	M
Total for D4 Add the paints in the boxes above	rt
Rating of Site Potential if score is: 12-16 # H 6-11 # M 0-5 # L Record the rating on the first page	first page
D 5.0. Does the landscape have the potential to support hydrologic functions of the site? D 5.1. Does the wetland receive stormwater discharges? NoteD	0
D 5.2. is >10% of the area within 1.50 ft of the wetland in land uses that generate excess runoff? You = 1) No = 0	_
D 5.3. Is more than 25% of the contributing basin of the wedand covered with intensive human land uses (residentisher 3.1 residence) = 3.1 residence) = 9.1 residence) = 9.1 residence) = 9.1 residence = 1. No(D/V)	0
Total for D S Add the points in the boxes above	م.
Rating of Industria December 2 m II () and made on the	

0 D 6.0. Are the hydrologic functions provided by the site valuable to society?

D 6.1. The unit is in a landscape that has flooding problems. Choose the description that best matches conditions enound the wedand unit being rated. Do not add points. Choose the bighest score if more than one condition is met. The wedand captures surface water that would otherwise flow down-gradient into areas where flooding has points = 2 points = 1 D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plant. points = 0 The existing or potential outflow from the wetland is so constrained by human or natural conditions that the points = 0 Add the points in the boxes above Flooding occurs in a sub-basin that is immediately down-gradient of unit. water stored by the wetland cannot reach areas that flood. Explain why _ Surface flooding problems are in a sub-basin farther down-gradient. damaged human or natural resources (e.g., houses or salmon redds); There are no problems with flooding downstream of the wetland. Flooding from groundwater is an issue in the sub-basin. Total for D 6

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Record the rating on the first page

Water Quality Functions - Indicators that the site functions to Improve water quality
R 1.0. Does the site have the potential to improve water quality?
R.L.J. Area of surface depressions within the Riverine wetland that can trap sediments during a flooding event:
cover < ⅓ area of wetland
No depressions present
with >90% cover at person height, not Cowardin classes
\
Trees or shrubs > 7, area of the Wetland
Herbaceous plants (> 6 in high) > 1/s area of the wetland points = 3
Trees, shrubs, and ungrazed herbaceous < 1/1 area of the wetland
Total for R.1 Add the points in the boxes above
Rating of She Potential If score is: 12-16 = H 6-11 = M 6-5 = L Record the roting on the first page
R 2.0. Does the landscape have the potential to support the warfer quality function of the site?
R.2.1. is the wetland within an incorporated city or within its UGA?
R.2.2. Does the contributing basin to the wetland include a JdGA or incorporated area? Yes # 1 No # 0
R.2.3. Does at least 10% of the contributing basin contain tilled fields, pastures, or forests that have been clearcut
R 2.4. is > 10% of the area within 1.50 ft of the wetland in land uses that generate pollutants? Yes = 1. No = 0
R 2.5. Are there other sources of pollutants forming into the wetland that are not listed in questions R 2.1-R 2.4 Other sources.
Total for R.2 Add the points in the boxes above
Rating of Landscape Potential Jesore is: 3-6 = H 1 or 2 = M 0 = L Record the rating on the first page
R.3.0. Is the water quality improvement provided by the site valuable to society?
R.3.1. Is the westland algoriga stream or river that is on the 303(d) list or on a tributary that drains to one within 1 mi?
Yeshi Nomo
R.3.2. Is the variand along a stroam or rivor that has TMDL limits for nutrients, toxics, or pathogens?
83.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? (answer
VES If there is a TMDL for the drainage in which the unit is found)
Total for R 3
Design of Value & coverier 2.4 m I to 10 m Record the station on the first name

Wetland name or number

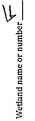
Estimate the average width of the wetland perpendicular to the direction of the Jiow and the width of the
360,000
points = 9
points = 6
points = 4
points = 2
points = 1
R.4.2. Characteristics of plants that slow down water velocities during floods: <i>Tradifierge woody debrits as forest or</i> characteristics of the notion of the person characteristics and the person characteristics and the person characteristics and the person characteristics are also person characteristics.
points # 7
points # 4
points = 0
Add the points in the boxes above
Record the rating on the first page
Yes= 0 No=1
Yes=1 No=0
Yes # 0 No # 1
Add the points in the boxes above
Record the rating on the first page
The sub-basin immediately down-gradient of the wetland has tlooding problems that result in damage to human or patrimi recourses (e.g., bouses or salmon nedds)
points = 1
points ≈ 0
R 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? Yos = 2 No = 0
Add the points in the boxes above
ood control plan? Yes = 2 No = 0 he boxes above
points = 6 points = 4 points = 1 points = 1 points = 1 points = 7 points = 7 points = 7 points = 7 points = 0 points = 0 points = 0 rithe boxes above tecord the rating on the first page tof 7 Vos = 0 No = 1 Vos = 1 No = 0 Vos = 1 No = 0 Vos = 1 No = 0 Vos = 1 No = 0 Vos = 1 No = 0 Vos = 1 No = 0 Vos = 1 No = 0 Vos = 1 No = 0 Vos = 1 No = 0 Vos = 1 No = 0 Archedocontrol plan? Vos = 2 No = 0 Archedocontrol plan? Vos = 2 No = 0 Archedocontrol plan? Vos = 2 No = 0 Archedocontrol plan? Vos = 2 No = 0 Archedocontrol plan? Vos = 2 No = 0 Archedocontrol plan? Vos = 2 No = 0 Archedocontrol plan? Vos = 2 No = 0 Archedocontrol plan? Vos = 2 No = 0 Archedocontrol plans Vos = 2 No =

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HABITAT FUNCTIONS	S - Indicators that si	HABITAT FUNCTIONS - Indicators that site functions to provide important habitat	or all now classes. 6 important habitat	
H 1.0. Does the site have the potential to provide habitat?	ve the potential to pro	vido habitat?		
H 1.1. Structure of plant of Cowardin plant clas	community: <i>Indicators at</i> sees in the wetland. Up t an 10% of the unit if it is a	c Cowardin classes and str o 10 patches may be comb smaller than 2.5 ac. Add th	H 1.1. Structure of plant community: Indicators are Cowardin classes and strata within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold of X ac or more than 10% of the unit if it is smaller than 2.5 ac, Add the number of structures checked.	
Aquatic bed			4 structures or more; points # 4	
Sorub-shrub (3	Scrub-shrub (aroas where shrubs have > 30% cover)	> 30% cover)	2 structures: points 1	ـــر
Forested (area If the unit has	forested (areas where trees have > 30% cover) If the unit has a Forested class, check If:	% cover) }:	1 structure: points = 0	-
The Forested of that each cov	The Forested class has 3 out of 5 strata (canopy, so that each cover 20% within the Forested polygon	(canopy, sub-canopy, shr ed polygon	The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon	
H 1.2. Hydroperlods				
Check the types of more than 10% of t	water regimes (hydrope) the wetland or ½ ac to co	Chock the types of water regimes (hydroperiods) present within the wetland. The water n more than 10% of the wetland or % ac to count (<i>see text for descriptions of hydroperiods</i>).	Chock the types of water regimes (hydroperiods) present within the wedand. The water regime has to cover more than 10% of the wetland or ½ as to count (<i>see text for descriptions of hydroperiods</i>).	
Formanently f	Permanently flooded or inundated	•	4 or more types present; points #3	
1	Seasonally flooded or Inundated		3 types present: points # 2	,
Saturated only	de la mandade		1 types present; points@1	are and a
Permanently f	lowing stream or river in	Permanently flowing stream or river in, or adjacent to, the wetland		
Seasonallyflor	Seasonally flowing stream in, or adjacent to, the wetland	nt to, the wetland		
Lake Fringe wetland	etland		2 points	
Freshwater tidal wetland	dal wetland		2 points	
H 1.3. Richness of plant species	pecies		3000	
Count the number	of plant species in the w	Count the number of plant species in the wetland that cover at least 10 Ω^2	.0#2.	-
Different patches of the species. Do no	if the same species can but of include Eurosian millo	e combined to meet the size.	Offerent patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurosian milliall, rend commonmes, mental parameter Committee when	
if you counted; > 19 spades	9 species	dina considerance	C = stolog	
₩,	5 - 19 spodes		Topolog	
\$	< 5 spedes		points = 0	
H 1.4. Interspersion of habitats Decide from the diagram the classes and unvegets have four or more plant	bitats agrams bolow whether in regetated areas (can incli piant classes or three clas	interspersion of habitats. Decide from the habitats below whether interspersion among Cowardin plants classes (d the classes and unvegetated areas (can include open watter or muditats) is high, moderate, har four or more plant classes or three classes and open water, the rating is always high.	escribed I	
	10			
$\bigg)$) _	\sim		C
Norfe = 0 points	Low = 1 point	polnt	Modorato = 2 points)
) of one of the state or				
in this row are HIGH = 3points				
700		700		

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WDFW Priority Habitats

Priority habitatic listed by WDFW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in Washington Department of Fish and Wildling 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp. http://wdfw.wa.gov/zouldcathons/00165/wdfw00165.pdf or access the list from here: http://wdfw.wa.gov/zouldcathons/bis/list/).

Count how many of the following priority habitats are within 330 ft (100 m) of the wetland units NOTE: This question is independent of the land use between the wetland unit and the priority habitat

- Aspen Stands: Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- Blodiversity Areas and Corridors: Areas of hubitat that are relatively important to various species of native fish and
 wildlife (full descriptions in WDFW PHS report).
- Herbaccous Balds: Variable size patches of grass and forbs on shallow solls over bedrock.
- Oid-growth/Mature forests: <u>Old-growth wort of Cascade creat</u> Stands of at least 2 tree species, forming a muitbrayered canopy with occasional small openings; with at least 8 trees/ac [20 trees/ha] > 52 in (81 cm.) dah or > 200 years of ago, <u>Mature foreats</u> Stands with average dlameters exceeding 21 in (53 cm.) dah; crown cover may be loss than 100%, decay, decadence, numbers of sangs, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade creat.
- . Oregon White Oak: Woodland stands of pure oak or oak/sonlier associations where canopy coverage of the oak component is important (full descriptions in WDFW PHS report p. 158 see web link above).
 - Riparlan: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.
- Westside Prairies: Herbaccous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (fuil descriptions in WDFW PHS report p. 161 see web link above).
- Instream: The combination of physical, biological, and chemical processes and conditions that interact to provide
 functional life history requirements for instream fich and wildfile resources.
- Nearshore: Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and Proges Costant Nearshore, (full descriptions of habitats and the definition of relatively undisturbed are in WDFW reports see web lilk on previous page).
- Caves: A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in solls, rock, ice, or other geological formations and is large enough to contain a human.
- Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.
- Talus: Homogenous areas of rock nubble ranging in average size 0.5 6.5 it (0.15 2.0 m), composed of basait, andesite, And/or sedimentary rock; including riprep slides and mine tallings. May be associated with diffs.
- Snags and Logs: Trees are considered snags if they are doud or dying and exhibit sufficient decay characteristics to
 enable cavity exervation/use by wildlife, Priority snags have a diameter at broass height of > 20 in (\$1 cm) in western
 Washington and are > 6.5 ft (2 m) in height Priority logs are > 12 in (\$30 cm) in diameter at the largest end, and > 20 ft
 (\$6 m) long.

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed

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Wetland name or number

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type Check of any critishs that apply to the wetland, Cities the exceptly when the appropriate critical are met.	the category when the appropriate criteria are met.	Category
SC 1.0. Extuarine wetlands Does the wetland meet the following criteria for Extuarine wetlands? — The dominant water regime is tidal, — Vegerated, and With a saining presere than 0.5 ppt Yes—Go to SC	or Estuarine wetlands? Yes –Go to SC 1.1 Na= Not an ostuarine wetland	
SC1.1, is the wetland within a National Wildlife Refuge, N Preserve, State Park or Educational, Environmenta		S. F.
SC1.2. Is the wethind unit at least 1 ac in size and meets at least two of the following three conditions? — The wetland is relatively unfaiturined (has no diking, disching, filling, subvision, grazing, an impaint pacifics. (if non-native species are subvision, grazing, see page 2. The At least 3.0 of the Indiward edge of the wetland has a 100 ft buffer of shrub, forest, or unger	the wethind unit at least 1 ac in size and meets at least two of the following three conditions? — The wethind is relatively undisturbed thas no diking, disching, filling, cutivoration, gracing, and has less than 10% cover of non-native pinals species, in form-native species are Sporting, see page 25) — At least 8, of the landward edge of the wetland has a 100 it buffer of shrub, forest, or ungrazed or un-	ਤੌ
mowed grassland, — The wedand has at loast two of the following i contiguous freshwater wedands.	mowed grassland. The weetand has at loast two of the following features: ādal channels, depressions with open water, or entiguous freshwater wetlands.	= 3
SC 2.0. Wetlands of High Conservation Value (WHCV) SC 2.1. Has the WA Department of Natural Resources updated their website to include the list Conservation Value? SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? SC 2.3. Is the wetland list on the WDNR database that contains a Natural Heritage wetland? SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www.ldnr.wa.gov/nho/re/darsk/dataseasch/swhipwentands.pdf Yes - Contact WNHP/WDNR and go to SC 2.4. SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation their website?	SC 2.0. Wetlands of High Conservation Value (WHCV) SC 2.1. Has the WA Dopartment of Natural Resources updated their website to include the list of Veylands of High Conservation Value? SC 2.2. Is set wetland Israel on the WDNR database as a Wetland of High Conservation Value? Yes — Category! No = Not a WDNR SC 2.3 is the wetland Israelon/Fownship/Hange that contains a Natural Herthgeworther with the SC 2.3 HIBS/Novell drn was zev/Into/redes/Kidatassastch/sunpowerlands.cd Yes — Contact WNHP/WOWR and go to SC 2.4 No = Not a WHCV Yes — Contact WNHP/WOWR and go to SC 2.4 No = Not a WHCV Yes a Category! No = Not a WHCV	S C t
SC 3.0. Bogs: Does the wetland (or any part of the unit) meet both the critoria for soils and vegetation boses the wetland least and vegetations. SC 3.1. Does an area within the vetland unit have organic soil horizons, effect preats or nucks, more of the first 32 in of the soil profile. SC 3.2. Does an area within the wetland unit have organic soils, either peats or nucks, that are seen bedrock, or an impermeable hardpan such as day or volicanic ash, or that are food pond? SC 3.2. Does an area within peats or mucks have more than 70% cover of mosts, at the are food pond? SC 3.3. Does an area with peats or mucks have more than 70% cover of mostses at ground level, cover of plant species listed in Table 4? NOTE: if you are unestable about the ockent of mostses in the understary, you may substant species in 7 bable 4 are present, the wetland is a bog.	SC 3.0. Bogs the wetland (or any part of the unit) meet both the oritaria for solis and vegotation in bogs? Use the key bods the wetland is a masser YES you will still need to crate the wetland based on lts functions. Below, if you can area within the wetland unit have organic soil horizons, either peats or muses, that compose 16 in or more of the first 2 in of the soil profile. SC 3.1. Does an area within the wetland unit have organic soils, either peats or muses, that compose 16 in of so SC 3.2. Does an area within the wetland unit have organic soils, either peats or mucks, that are least than 16 in deep ower bedrock, or an impermeable hardpan such as day or velicanic ash, or that are floating on top of a lake or poof of so an area with peats or mucks have more than 70% cover of masses at ground level, AND at least a 30% cover of plant species listed in Table 4? SC 3.3. Does an area with peats or mucks have more than 70% cover of masses at ground level, AND at least a 30% cover of plant species listed in Table 4? NOTE: If you are uncertain about the extent of mozes in the understory, you may substitute that criterion by measuring the pil of the wester that seeps into a hole dug at least 16 in deep, if the ph is less than 5.0 and the plant species in Table 4 are present, the wetland is a bog.	i di
SC 3.4. Is an area with poats or mucks ferested (> 30% cox western hemlock, lodgepole pine, quaking aspen, species (or combination of species) listed in Table	SC 3.4. Is an area with posts or mucks forested (> 30% cover) with Siffe spruce, susbiphe II, western red exedsr, western hemlock, lodgepole pine, quaking aspen, Engainann spruce, or western white pine, AVD any of the species (or combination of species) listed in Table 4 provide more than 30% of the ozore unfact the cannopy? Yes = Is a Category I bog (Ng≡ Is not a bog.	

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SC 4.0. Forested Wetlands	
Does the wetland have at least 1 configueur arm of forest that meets one of these cirkerla for the WA Department of Fish and Wildlife's forests as priority habitats? If you answer YES you will still need to rate the wetland based on its functions. — Old-growth forests west of Cascade creat; Stands of at least two tree species, forming a multi-layered anopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at loast 200 years of ago (R have a diameter at breast height (falls) (3.2 In 81 m.) or more. — Matura forests (west of the Cascad Casci) Stands whore the largest trees are 80-200 years old OR the species that make up the canopy have an average diameter (dah) acceeding 21 in (3.5 cm).	ğ
SC.5.0. Wetbands in Coastal Lagoons Does the wetband moet all of the following criteria of a wedand in a coastal lagoon? — The wetband fits in a depression adjoinent to marine waters that is wholly or partially separated from marine waters by sandbands, cravel bands, which we have from marine waters the sand of the comments.	
— The lagoon in which the wetland is located contains ponded where that is saline or brackleh (> 0.5 ppt) during most of the year in at loan a portion of he lagoon (precyfor the most end not he bottom).	ਤੋਂ
/ # # #	5
mowed grassland. — The wedland is larger than ¹ / ₁₀ ac (4350 ft ²)	
SC 6.0. interdunal Worklands Et the weekland west of the 1889 line (also called the Western Soundary of Upland Ownership or WBUO)? If you crawer yes you will still need to rate the weekland based on its habitest functions. In practical terms that means the following goographic areas: — Inno Reach Denicular, in nord, uses a cell as	
— Grayland-Westing with a work of St 105	ā
— Dectar and rest, copalist, bands west of SK 1115 and SK 1109 Ves – Go to SC 6.1 No a pot an interdunal wetland for rating	
SC 6.1. Is the wedtand 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H.H.H or H.H.M. for the three appears of function)? Yes = Catagory No = Go to SC 6.2 is the westend 1 see it less than the it is a morelle of underwed what is a constitution of the formal see it is a morelle of underwed what is a constitution.	⊒ Cat.
SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a mosaic of wedands that is between 0.1 and 1 ac?	8 ≡
Yos = Category III No = Category IV	Çat. ⊽
Category of wetland based on Special Characteristics If you answered No for all twoss, enter "Not Annilcable" on Summany Form	文

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RATING SUMMARY – Western Washington

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Wetland name or number_

Date of site visit: 5/4/22	Rated by E. M. INS L. HALL Trained by Ecology? Yes No Date of training 20 LS	Wetland has multiple HGM classes? Y Y
S	小シュー・Trained by Ecology 学	Ø ← Wetland has m
Name of wetland (or ID #): L. John L.	Rated by E.M. LS [[-]	HGM Class used for rating $0.9 \Leftrightarrow$

NOTE: Form is not complete without the figures requested (figures can be combined).

Source of base aerial photo/map.

OVERALL WETLAND CATEGORY (based on functions or special characteristics)

1. Category of wetland based on FUNCTIONS Category 1 – Total score = 23 – 27

_Category III - Total score = 16 - 19 Category II - Total score = 20 - 22 _Category IV - Total score = 9 - 15

FUNCTION	Vaiter Quality	T	Hydrologic		*	Habitat	3¢	
	Ç		Circle the appropriate ratings	å	ropri	ric re	rtings	
Site Potential	₹	I	[] [3]	Γ.	Ŧ	Σ	9	
Landscape Potential	L M	I	3		=	≥	Э	
Value (r.	3	Γ.	E	Σ	_	2
Score Based on Ratings	4		و		V)	LA.		

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	n 1
Wetland of High Conservation Value	1
208	H
Mature Forest	11
Old Growth Forest	1
Coastal Lagoon	n i
interdunal	ப மாம்
None of the above	/

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Score for each function based on three ratings (order of ratings is not important)

To answer questions: Figure #

H21, H2.2, H2.3 D3.1, D3.2

Lecution of eutlet (can be added to map of hydroperiods)
Boundary of area within 150 ft of the wetland (can be added to another figure)
Map of the contributing basin

I kin Polygon Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat a ned undisturbed habitat second part of 1996(d) listed waters in basin (from Ecology website) Sereen capture of Insp of Toolog il ov WRA in which unit is lound (from web)

Riverine Wetlands

6 = H,M,L 6 = M,M,M 9 = H,H,H 8 = H,H,M 7 = H,H,L 7 = H,M,M 5 = H,L,L 5 = M,M,L 4 = M,L,L 3 = L,L,L

Z Z

Figure #

To answer questions: H11, H14

\$4.1

To answer questions: Figure #

L2.2 H2.1, H2.2, H2.3

R2.2, R2.3, R5.2 H2.1, H2.2, H2.3

Boundary of area within 150 ft of the wetland (can be added to another figure) R 12.4
Plant cover of trees, shrubs, and herbaceous plants
Width of unit vs. width of stream (can be added to another figure) R 14.1
R 4.1.

Screen capture of map of 303(d) listed waters in basin (from Ecology website) R3.1.
Screen capture of list of TMDLs for WRIA in which unit is found (from web) R3.2, R3.3.

Lake Fringe Wetlands

Map of the contributing basin
1 km Polygon: Area that extends 1 km from entire wetland edgo - Including polygons for accessible habitat and undisturbed habitat

Sacreen capture of map of 303(d) listed waters in busin (from Ecology website) 53.1, 53.2

Screen capture of list of TMDLs for WRIA in which unit is found (from web) 53.3

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52.1, 55.1 H 2.1, H 2.2, H 2.3



HGM Classification of Wetlands in Western Washington

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in For questions 1-7, the criteria described must apply to the entire unit being rated. questions 1-7 apply, and go to Question 8.

1. Arg the water levels in the entire unit usually controlled by tides except during floods?

NO 80 to 2

YES - the wetland class is Tidal Fringe - go to 1.1

1.1 Is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

NO - Saltwater Tidal Fringe (Estuarine)

lf your wetland can be classified as a Freshwater Tidal Fringe use the forms for Riverine wetlands. If it is Saltwater Tidal Fringe it is an Estuarine wetland and is not scored. This method cannot be used to YES - Freshwater Tidal Fringe score functions for estuarine wetlands. The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit

YES - The wetland class is Flats (Ng). Bo to 3 Tyour wetland can be classified as a Flats wetland, use the form for **Depressional** wetlands.

3. Does the entire wetland unit meet all of the following criteria?

__The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size;

It least 30% of the open water area is deeper than 6.6 ft (2 m).

YES - The wetland class is Lake Fringe (Lacustrine Fringe) No - go to 4

4. Does the entire wetland unit meet all of the following criteria?

The wetland is on a slope (slope can be very gradual),

The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks,

The water leaves the wedand without being impounded.

NO ≠ go to 5

YES - The wetland class is Slope

shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft NOTE: Surface water does not pond in these type of wetlands except occasionally in very small and

The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that Does the entire wetland unit meet all of the following criteria?

___The overbank flooding occurs at least once every 2 years.

stream or river,

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m

Wetland name or number __

NO) go to 6 -NOTE: The Riverine unit can contain depressions that are filled with water when the river is not

Is the entire wedand unit in a topographic depression in which water ponds, or is saturated to the surface, at some time during the year? This means that any outlet, if present, is higher than the interior of the wetland. 9

NO - go to 7

YES/ The wettand class is Depressional

Is the entire wedand unit located in a very flat breat with no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural 7

NO - go to 8

YES - The wetland class is Depressional

classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the Your wetland unit seems to be difficult to classify and probably contains several different HGM wetland unit being scored. œί

is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 total area.

HGM classes within the wetland unit being rated	HGM class to use in rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake Fringe	Lake Fringe
Depressional + Riverine along stream	Depressional
within boundary of depression	
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other	Treat as
class of freshwater wetland	ESTUARINE

lfyou are still unable to determine which of the above criteria apply to your wetland, or ifyou have more than 2 HGM classes within a wetland boundary, classify the wetland as Depressional for the

N M 5 Wedand has an unconstricted, or slightly constricted, surface outer unaus permanently flowing dirch. points = 1 Wedand is a flat depression (QUESTION 7 on key), whose outer is a permanently flowing dirch. D 1.2. The soil. The below the surface for sulf liveral is true clay or true organic (use NRCS definitions)/ves = 4. No. (D.) D 1.3. Characteristics and distribution of persistent alants (Tenegent, Scrub-shrub, and/or Ferested Cowardin dasses): Wedand has persistent, ungraved, plants > 55% of a rea points = 4 Add the points in the boxes above Characterizitist of surface water outliews from the westurns. We than it is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it ino outlety. On points (3)Water Quality Functions - Indicators that the site functions to improve water quality points = 1 oolnts ≈ 0 Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet **DEPRESSIONAL AND FLATS WETLANDS** This is the area that is ponded for at least 2 months. See description in manual. Area seasonally ponded is > 14 total area of wetland D 1.0. Does the site have the potential to improve water quality? D 1.1. Characteristics of surface water outflows from the wetland: Wetland has persistent, ungrazed plants $> 1_{10}$ of area Wetland has persistent, ungrazed plants $< 1_{10}$ of area Area seasonally ponded is > ¼ total area of wetland Area seasonally ponded is < ½ total area of wetland D 1.4. Characteristics of scassonal ponding or inundation:

Record the rating on the first page Yes=1 Non0 Yes (* 1 No w 0 D 2.0. Does the landscape have the potential to support the water quality function of the site? D 2.2. Is > 10% of the area within 150 ft of the wedland in land uses that generate pollutants? Rating of Site Potential If score is: 12-15 = H 1/6-11 = M 0-5 = 1 D 2.1. Does the wetland unit receive stormwater discharges?

0 D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1-D 2.3? Source $\log M_{\rm D} = 1$ No $\log M_{\rm D}$ Add the points in the boxes above Yes = 1 No(40) D 2.3. Are there septic systems within 250 ft of the wetland Total for D 2

Rating of Landscapo Potential If score is: 3 or 4 # H / Lor 2 = M O = L Record the rating on the first page

0 D 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality (answer YES I) there is a TMDL for the basin in which the unit is found? D 3.1. Does the westand discharge alreatly (i.e., within 1 mi) to a stroam, river, lake, or marine water that is on the 303(c) list? Add the points in the boxes above Yes (1) No = 0 Record the rating on the first page 0 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list? D 3.0; is the water quality improvement provided by the site valuable to society? Rating of Value If score is: 1/2-4 = H 1 = M 0 = L

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m

Wetland name or number

<u>DEPRESSIONAL AND FLATS WETLANDS</u> Hydrologic Functions - indicators that the site functions to reduce flooding and stream destradation	ation
D 4.0. Does the site have the potential to reduce flooding and erosion?	
D 4.1. Characteristics of surface water outflows from the worthind: Wetland is a depression or flat depression with no surface water leaving it (no outlet) Wetland has an intermittentity flowing stream or effeth, OR highly constricted permanently flowing outletpoints= 2. Wetland has an intermitential flowing outlet by whose outlet is a permanently flowing ditch points= 1. Wetland is a flat depression (QuisfigNV ontaritete, surface outlet that is permanently flowing points= 1. Wetland has an unconstricted, or signify outsricted, surface outlet that is permanently flowing points= 0.	+ - -
D 4.2. <u>Death of statings dusting was pariods;</u> Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water of lifely, has despect port. Warks of pending are 3 ft or more above the surface or bottom of outlet. Dobtes = 7	
l from surface or bottom of outlet urface or bottom of outlet	C
In wednand is the body accepted wedning Wednand in wednand is fibred but has small dependenced on the surface that trap water points = 1 Marks of ponding less than 0.5 ft (5 in))
D 4.3. <u>Contribution of the wetland to storage in the watersheel</u> . Estimate the ratio of the area of upstream basin contributing surface water to the wetland to the area of the wetland unit leaf.	
The area of the basin is less than 10 times the area of the unit points = 5. The area of the basin is 10 to 100 times the area of the unit points = 0. The area of the basin is more than 100 times the area of the unit points = 0.	M
Total for D4 Add the points in the boxes above	H
	,

Record the rating on the first page Record the rating on the first page D 5.3. is more than 25% of the contributing bash of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? Yes = 1 No (0) 05.2. is >10% of the area within 150 ft of the wedand in land uses that generate excess nunoff? Yerf=1) No=0 Add the points in the boxes above D 5.0. Does the landscape have the potential to support hydrologic functions of the site? Rating of Landscape Potential If score is: 3 # H / Lor 2 m M O # L D S.1, Does the wetland receive stormwater discharges? Total for D 5

D 6.1. The unit is in a landscape that has flooding oroblems. Choose the description that best matches conditions around the wedand unit being rated. Do not add points. <u>Choose the highest scare if mare than one condition is met.</u> The wedand captures surface water that would otherwise flow down-gradient into areas where flooding has points = 1 The existing or potential outflow from the wetland is so constrained by human or natural conditions that the Flooding occurs in a sub-basin that is immediately down-gradient of unit. D 6.0. Are the hydrologic functions provided by the site valuable to society Surface flooding problems are in a sub-basin farther down-gradient. damaged human or natural resources (e.g., houses or salmon redds): Flooding from groundwater is an Issue in the sub-basin.

points = 0 Add the points in the boxes above There are no problems with flooding downstream of the wetland. Rating of Value if score is: 2-4 # H 1/2 # M O # L Total for D 6

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Record the rating on the first page

points = 0

wator stored by the wetland cannot reach areas that flood. Explain why

RIVERINE AND FRESHWATER TIDAL FRINGE WETLANDS	
Water Quality Functions - Indicators that the site functions to Improve water quality	quality
R 1.0. Does the site have the potential to improve water quality?	
R.L.L. Area of surface depressions within the Riverine wotland that can trap sediments during a flooding event:	nt
	points = 8
	points # 4
: cover < ½ area of wetland	points = 2
1	points = 0
with >90% cover at person height, not Cowardin classes)	
	points = 8
	points = 6
Horbaceous plants (> 6 in high) > 2/3 area of the wetland	points = 6
	points = 3
Trees, shrubs, and ungrazed herbaceous < 1/, area of the wetland	Points = 0
Total for R.1. Add the points in the boxes above	
Rating of Site Potential f score s:12-16 = H6-11 = M0-5 = 1	Record the rading on the first page
R 2.0. Does the landscape have the potential to support the water quality function of the size?	
R 2.1. is the wetland within an incorporated city or within Its UGA?	No # O
R 2.2. Does the contributing basin to the wedland include a UGA or incorporated area? Yes # 1	Yes=1 No = 0
R 2.3. Does at least 10% of the contributing basin contain tilled fields, pastures, or foods that have been clearcut within the last 5 years?	been clearcut Yes m.1. No m.0
R 2.4, Is > 10% of the area within 150 ft of the wetland in land uses that genorate pollutants? Yes # 1	Yesmi Now0
R.2.5. Are there other sources of pollutants coming into the wetland that are not listed in questions R.2.1-R.2.4. Other sources	12.1-R2.4 Yos≔1 No≖0
Total for R.2 Add the points in the boxes above	s above
Rating of Landscape Potential If score is: 3-6 = H Zor 2 = M 0 = L Record the	Record the rating on the first page
R 3.0. is the water quality improvement provided by the site valuable to society?	
R 3.1. is the wetland along a stream or river thanks on the 303(d) list or on a tributary that drains to ono within 1 mi?	in 1 mi?
	Yese 1 No = 0
R 3.2. is the wetland along a stream of river that has TMDL limits for nutrients, toxics, or pathogons? Yes = 1	Yes#1 No#0
R.3.3. Has the site been identified in a watershod or local plan as important for maintaining water quality? (answer YS) if there is a TNQL for the drainage in which the unit is found)	ality? (answer
Total for R 3 Add the points in the boxes above	sabove
Rating of Value (15, 24= H1=M _0=1, Record the	Record the rating on the first page

Wetland name or number

I COUNTY TO THE PROPERTY OF TH	509
R 4.0. Does the site have the potential to reduce flooding and erosion?	
8 4.1. Characteristics of the overbank storage the wetland provides:	
Estimate the average width of the wetland perpendicular to the direction of the flow and the width of the	
Second of river channel (distance between banks). Calculate the ratio: (average width of wedand)/(average	
mast.	
nan 20	
if the ratio is 5-<10 points = 4	
If the ratio is < 1 points = 1	
R 4.2. Characteristics of plants that slow down water velocities during floods: Treat large woody debris as farest or	
shrub. Choase the points appropriate for the best description (polygons need to have >30% cover at person	
neight, these are two consequents also s_1 , s_2 , s_3 , s_4	
Forces of section (1) years on consequent plants 1/2 area Forces or shortly for 2 1/2 area OR emergent plants 2 1/2 area	•
\	
Add Chapter In the be	
Rating of Sito Potential If score is: 12-16 # H 6-11 = M 0-5 = L Record the rading on the first page	on the first pag
R.5.0. Does the landscape have the potential to support the hydrologic functions of the site?	
R5.1. Is the stream or rivor adjacent to the wetland downpat?	
R.S.Z. Does the up-gradient watershed include a UGA or incorporated area?	_
R.S.3. Is the up-gradient stream or rivor controlled by dams?	
Total for R.5 Add the points in the boxes above	
Rating of Landscape Potential if score is: 3 = H1 or 2 = M0 = L Record the rating on the first page	on the first pag
R G.O. Are the hydrologic functions provided by the site valuable to society?	
R.G.L. Distance/Go the nearest areas downstream that have flooding problems? Choose the description that best fits the site.	
the wetland has flooding problems that result in dama	
	^
Surface flooding problems are in a sub-basin farther down-gradient points at No flooding problems anywhere downstream	
R.6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? Yes # 2. No # 0	26
Total for R.6 Add the points in the boxes above	

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HABITAT FUNCTION	HABITAT FUNCTIONS - Indicators that site functions to provide important habitat	s of all Holly Casses.	
H 1.0. Does the site h	H 1.0. Does the site have the potential to provide habitat?		
H.1.1. Structure of plant Cowardin plant of of X or or nore to — Aquatic bod — Emergent — Emergent — Emergent — Forcetted (ar fifthe unit h fifthe unit h fifthe unit h factorited The forcetted The forcetted The forcetted The forcetted	H 1.1. Structure of plant community: Indicators are Cowardin classes and strata within the Forestad class. Check tho Cowardin plant classes in the webland. Up to 10 patches may be combined for each class to meet the threshold of X as or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked. Aquatic bod Aquatic bod Astructures or more; points = 4 Structures; points = 4 Structures; points = 4 Structures; points = 4 Structures; points = 7 Structure; points = 7 Structures; points = 7	rate within the Forested class. Check the blood for each class to meet the threshold he number of structures checked. 4 structures or meer: points = 4 3 structures; points = 2 2 structures; points = 7 1 structure; points = 0 1 structure; points	
H 1.2. Hydroperlods Chock the types of water more than 10% of the wer Permanently flooded Seasonally flooded of Cocanonally flooded of Seasonally flooded of Seasonally flooding at Seasonally flooding at Seasonally flooding at Freshwater tidal weel	Hydroperiods More than types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 1056 of the wethand or x as to count (see text for descriptions of hydroperiods). An inner types of present points = 2 persent points = 3 types present points = 3 types present points = 2 types present points = 2 persent points = 2 points = 3 types present points = 3 types present points = 3 types present points = 3 types present points = 3 types present points = 3 types present points = 4 types present points =	wetland. The water regime has to cover ons of hydroperiods. 4 or more types present: points = 3 3 types present: points = 2 2 types present: point(=1) 1 type present points = 0 and 2 points 2 points 2 points	_
H 1.3. Rithnocs of plant speedes Outur the number of plants Different parties of the sant the species. Do not helpted If you counted. > 19 species - 19 species - 5.19 species - 5.19 species	Rethnocs of plant species Count for the spant species in the westland that cover at least 10 ft? Count for spants of the stant species on be combined to meet the size threshold and you do not have to nome the species. Different partners of the stant species can be combined to meet the size threshold and you do not have to not necessary and the species. The species produce the species points are species to species be a species being the	10 ft?. so threshold and you do not have to name he loozestrife, Canadian thistle points >2 points = 1 points = 1	
H 14. Interspersion of habitats Declor from the diagram the diagram and unvegets heve four or more plants heve four or more plants Noné = 0 points All three diagrams in this row are HGH = 3 points	Interspection of habitats Doeddo from the diagrams below whether interspection among Cowardin plants classes (described in H.1.1), or the diasses and unvegetated areas (can include open water or muditats) is high, moderate, low, or none, if you have four or more plant classes or three classes and open water, the reting is always high. Low = 1, point Doed diagrams Doed diagram	rdin plant: classes (described in H.11), or tals is high, moderate, low, or none. If you writing is always high. Moderate = 2 points	0

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Large, downed, woody debrit within the wedand (> 4 in distinction of strong). Sanding anage (deb > 4 in) within the wedand Lorder at banks are present for a least 6.6 if (2 in) and/do overhanging plants extends at least 3.3 if (1 in) over a stroam (or ditch) in, or configuous with the weelind, for at least 3.3 if (10 in) expected by the stroam of the least 3.3 if (2 in) and (2 in) and (2 in) and (3 in)	
Undercut banks are present for at least 6.6 ft (2 m) and/or overhanging plants extends at least 3.3 ft (1 r over a stroam (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m) Sable steep banks of fine material that might be used by beaver or muskrat for donning (> 30 degree	
Stable steep banks of fine material that might be used by beaver or muskrat for donning (> 30 degree	
slope) OR signs of recent beaver activity are present (cut shrubs or trees that how not vet worthound	-
where wood is exposed) At lost: V. Ste of this standard new interfer always as used to be and the second se	
permanently or seasonally inundated (structures for egg-laying by amphibians)	
Invadive plants cover less than 25% of the wedland area in every stratum of plants (see H.1.1 for list of strata)	
Total for H 1 Add the points in the boxes above	7
Rating of Site Potential if score is; 15-13 = H 7-14 = M 0-6 = L	n the first p
H 2.0. Does the landscape have the potential to support the habitat functions of the site?	
l	L
Colculate: % undisturbed habitat + ((% moderate and low intensity land uses)/2) = %	
5	
> '/, (33.3%) of 1 km Palygon	
10-19% of 1 km Polygon	·
ed habitat in 1 km Polygon around the wotland.	
tat + [(% moderate and low intensity land uses)/2] =	
3	,
Undisturbed habitat 10-50% and > 3 patches [Indisturbed habitat < 10% and 10m patches 10m patche	
H 2 3 (and time interaction of the Delicement M	
Control of the Contro	0
\$ 50% of 1 km Polygon is high intensity	7
Add the points in the bo	k
Rating of Landscape Potential If score is: 4.6 = H 1.3 = M 2/2.1 a.l. Record the rating on the first page	the first po
H 3.0. is the habitat provided by the site valuable to society?	
H 3.1. Does the site provide habitat for species valued in laws, regulations, or politics? Chaase only the highest serve	L
that applies to the wetland being rated.	
Sity meets ANY of the following criteria:	_
thin 100 m (see next page)	
— If provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)	Ч
It is mapped as a sociation for an individual workin priority species It is a Wedland of High Conservation Value as determined by the Department of Natural Resources	ı
— It has been categorized as an important habitat site in a local or regional comprehensive plan, in a Sharelina Martin allocations.	
Site has 1 or 2 priority habitats (listed on next page) within 100 m	
O*L Record	the first p
recented remains by section for Western WAY 2014 Update Adding Form - Effective January 1, 2015	



WDFW Priority Habitats

Priority, habitats listed by WIDEM (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Flats and Wildlife, 2008. Priority Habitat and Species List. Olympia, Washington, 177 pp. http://wdfw.wa.ce/publicetions/00165/wdfw00165.pdf or access the list from here: http://wdfw.wa.gov/conservation.phs./list/).

Count how many of the following priority habitatic are within 330 (t (100 m) of the wetland unit: NOTE: This question is independent of the land use between the wetland unit and the priority habitat.

- -- Aspen Stands: Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- Blodiversity Areas and Corridors: Areas of habitat that are relatively important to various species of native fish and
 wildlife (full descriptions in WDFW PHS report).
- --- Herbaceous Balds: Variable size patches of grass and forbs on shallow soils over bedrock
- Old-growth/Mature forests: Old-grawth west of Gasande crest. Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) > 22 in (81 cm) dah or > 200 years of age, Mature forests. Stands with sweeping damneters exceeding 21 in (83 cm) dah; crown covor may be less than 190%; decay, decay, exceedence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Casande crest.
- Oregon White Oak: Woodland stands of pure oak or oak/oonlier associations where canopy coverage of the oak Komponent is important (fuil descriptions in WDFW PHS report p. 158 – see web link above).
- Riparlan: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.
- Westside Prairies: Herbaccous, non-forested plant communities that can either take the form of a dry prairie or a wet
 frairie (fuil descriptions in WDFW PRS report p. 181 see web link above).
- ... Instream: The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources.
- Nearshore: Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and
 Pages Sound Nearshore, (all discriptions of habitats and the definition of relatively undisturbed are in WDFW report see with link on previous page).
- Caves: A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.
- Cliffs: Greater than 25 ft (7.6 m) high and occurring bolow 5000 ft elevation.
- Falux: Homogenous areas of rock rubble ranging in average size 0.5 6.5 ft (0.15 2.0 m), composed of basait, andesite, and/or sodimentary rock, including riprap sildes and mine tailings. May be associated with ellifs.
 - Snags and Logs: Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation use by wildlife, Priority snags have a clameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm) in clameter at the largest end, and > 20 ft (6 m) long.

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed

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Wetland name or number __

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Check off any criteria that apply to the wetland. Citcle the category when the appropriate criteria are met.	
SC 1.0. Extrarine wetlands Does the wetland meet the following criteria for Estuarine wetlands? — The dominant water regime is tidal,	
— Vogerator, and — With a salinity greater than 0.5 ppt Yos –Go to SC 2.1 / New Not an estuarine wedand	
SC1.1. Is the workand within a National Wildlife Refuge, National Park, National Extuary Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151? Yes = Category1 No - Go to SC1.2	Cat 1
SC1.2. Is the wetland unit at loast 1 ac in size and moets at least two of the following three conditions? — The wetland is cristively undisturbed (has no diffing distribing filling, cultivation, grazing, and has less than 10% cover of non-valve pioles, possibly expected in the 10% cover of non-valve pioles (if non-valve species are Specifics, see page 25) — At least % of the bandward edge of the wetland has a 100 ft buffer of shrub, fores, or unspazed or un-	St. 1
mowed grassland. — The wetland has at least two of the following features: tidal channels, depressions with open water, or configuous freshwater wetlands. Yes = Category! No = Category!	; 8
SC 2.0. Wetlands of High Conservation Value (WHCV) SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wrotlands of High Conservation Value? SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? Yes = Category! No = Not a WHCV	Cat. I
SC2.3. Is the wetland in a Section/Township/Range that contains a Matural Heritage wetland? http://www.lancwa.sgs/inbe/reidesk/dahasearch/winbowetlands.od/ Yes—Contact WiNHP/WDNN and go to SC2.24 Ng = Not a WHCV SC2.4. Has WDNN identified the wetland within the S/T/R as a Wetland of High Conservation VSMeS and istock it on their website? Yes = Category! No = Not a WHCV	_
ind (or any part of the unit) meet both the criteria for soils and vegetation in the vertical soil such vegetation in the vertical soil of the count of the criteria for soils and vegetation in the vertical unit staff need to rise the vertical between the soil profile? Yos — So to \$5C.3.3 West — So to \$5C.3.3 West — So to \$5C.3.3 West — So to \$5C.3.3 West — So to \$5C.3.3 West — So to \$5C.3.3 West — So to \$5C.3.3 West — So to \$5C.3.3 Play be distributed in Table 4.7 You — So to \$5C.3.3 You have the vertical for mostose in the understory, you may substitute that scope into a hole dug at least 1.6 in deep. If the pH is it is play of the vertical that scops into a hole dug at least 1.6 in deep. If the pH is it peats or mucks forested (3.3% cover) with Sitics sonuce, subalphe fit, wers sell, or quaking spoon, Engelmann spence, or western white pir which pleading in the phole of provide more than 30% of the cover unity of year of species! Its above 1 best or well and \$5C.3.3 You — Is a Category I bog.	Cat. I

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Wetland name or number

Does the weetains Does the weetains see a least 1 <u>contiguous and</u> of forcet that meets one of these criteria for the WA Dopartment of Hah and Wildlife's forests as priority habitars? If you answer YES you will still need to rate the weetaind back do nist functions. — Old-growth forests (west of Cacade crest): Sands of at least two tree species, forming a multi-layered can opy with occasional small openings; with at least 8 trees/so (20 trees/ha) that are at least 200 years of age OR have a diameter at broast height (ship of 32 in (st 1m) or more. — Matura forests (west of the Cacade Cocrt): Stands whore the largest trees are 80 - 200 years of 00 R the species that make up the canopy have an average dameter (gibh occoding 21 in (53 cm). Yes = Category (No) Not a forested weetend for this section	g H
SC 5.0. Wotbands in Coostal Lagoons Doos, the wetband meet all of the following criteria of a wetband in a coastal lagoon? — The wetband like in a depression adjacent to marine waters that is wholly or partially saparated from marine waters by sandbank, gravel banks, shingle, or, less frequently, rocks.	
— The lagoon in which the wetland is located contains ponded water that is saline or brackish (>0.5 ppt) during most of the year in at least a portion of the lagoon (needs to be measured near the bottom) West of the wetland near all of the fellowing a least of the SESA (Note the wetland in a coastal lagoon of 5.1 per the wetland in a coastal lagoon.	Gt. I
— The workand is relatively undisturbed (has no disking, distabling, filling, cultivation, grazing), and has less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). — As heart & of the handward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-moused marking.	St =
The wedand is larger than ½, so (4350 ft²) Yes = Category I No = Category II	
SC 6.0. Interdunal Wetlands Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? If you answer yes you will still need to rate the wetland based on its habitat functions. In practical term mounts the following geographic areas: — Long Beach Peophstula: Lands west of 88 103	
Grayland-Westport Lands west of SR 115 and SR 105 Ocean Shores-Copalis: Lands west of SR 115 and SR 109 Yes – Go to SC 6.1 (No) of on interdunal wetland for rating	Cat
SC 6.1. Is the worland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H.H.H or H.H.M. for the three appeared of functions). SC 6.2. Is the worland 1 ac or larger and scores and 8 or 9 for the habitat functions on the form (rates H.H.H or H.H.M.M.M.M.M.M.M.M.M.M.M.M.M.M.M.M.M.M	ët ë
SC63. Is the unit between 0.1 and 1.ac, or is it in a mosalc of wetlands that is between 0.1 and 1.ac? Yes = Category II No = Category IV	≝ ≥;
Catogory of wetland based on Special Characteristics If you answered No for all types, onter "Not Applicable" on Summary Form	する

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RATING SUMMARY - Western Washington

Name of wetland (or D#): Linds Linds Date of site visit: 5 14 22
Rated by E. Philly L. Howthamed by Ecology? Thes _ No Date of training 2015 Wetland has multiple HGM dasses? Y VN 990 HGM Class used for rating_

NOTE: Form is not complete without the figures requested (figures can be combined). Source of base serial photo/map

OVERALL WETLAND CATEGORY (based on functions or special characteristics)

1. Category of wetland based on FUNCTIONS

__Category III -- Total score = 16 - 19 ∠Category II - Total score = 20 - 22 __Category I - Total score = 23 - 27 Category IV - Total score = 9 - 15

FUNCTION	_ 3	nprov ter Qu	Alle Sult	T	ydrok	Sign Sign	330	Habita	Ħ	
		6			Circle 1	do of	good	rlate n	atings	
Site Potential	I	3	_	x	×	F)	Ξ	Σ	9	
andscape Potential	ΞĆ	\ge	1	x	3		I	Σ	3	
Value (\exists	Σ	_	x	3		Ξ	Σ		TOTAL
Score Based on Ratings		4			(기			M		$\bar{\mu}$

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	п
Wedand of High Conservation Value	ĭ
Bog	1
Mature Forest	1
Old Growth Forest	ı
Coastal Lagoon	Ш 1
Interdunal	и மும்
None of the above	>

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Score for each function based on three cardings (order of ratings is not important)

9 E H,H,H 8 E H,H,M 7 E H,H,L 7 E H,H,L 6 E H,M,L 6 E M,M,M 5 E H,L,L 5 E M,L,L 4 E M,L,L 3 E L,L,L

CHARACTERISTIC	CATEGORY
Estuarine	11
Wedand of High Conservation Value	I
Bog	I
Mature Forest	1
Old Growth Forest	I
Coastal Lagoon	П 1
interdunal	vi agi ni
None of the above	>

Wetland name or number

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Mapof	To answer questions: Figure #
Cowardin plant classes	D13, H11, H1,4
Hydroperiods	D1,4, H1,2
Location of outlet (can be added to map of hydroperiods)	01.1,04.1
Boundary of area within 150 ft of the wetland (can be added to another figure)	02.2, 05.2
Map of the contributing basin	D4.3, D5.3
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2,3
polygons for accessible habitat and undisturbed habitat	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	03,1, 03,2
Screen capture of 11st of TMDLs for WRIA in which unit is found (from web)	03.3

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	1	
Hydroperlods	H12	
Ponded depressions	R1.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (can be added to another figure)	R4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Aroa that extends 1 km from entire wetland edge - including	H 2 1, H 2, 2, H 2, 3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R3.1	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	83.2 83.3	

Lake Fringe Wetlands

Map of the second secon	To answer questions: Figure #	-
Cowardin plant classes	L1.1, L4.1, H1.1, H1.4	•
Plant cover of trees, shrubs, and herbaceous plants	1.12	$\overline{}$
Boundary of area within 150 ft of the wetland (can be added to another figure) 1.2.2	12,2	_
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H2,1, H2,2, H2,3	F
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website) L3.1, L3.2	13.1, 13.2	$\overline{}$
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	13,3	$\overline{}$
		1

Slope Wetlands

Web O.	To answer questions:	Figure #
Cowardin plant classes	H11, H14	
tydroperlods	H1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	51.3	
Plant cover of dense, rigid trees, shrubs, and horbacoous plants	\$4.1	
can be added to figure above)		
Boundary of 150 ft buffer (can be added to another figure)	\$2.1, \$5.1	
Lkm Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	
solygons for accessible habitat and undisturbed habitat		
screen capture of map of 303(d) listed waters in basin (from Ecology website) 5.3.1, 5.3.2	53.1, 53.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	53.3	



HGM Classification of Wetlands in Western Washington

For questions 1-7, the criteria described must apply to the entire unit being rated

probably have a unit with multiple HGM classes. In this case, Identify which hydrologic criteria in If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you questions 1-7 apply, and go to Question 8.

Are the water levels in the entire unit usually controlled by tides except during floods?

(NO 2/go to 2

YES - the wetland class is Tidal Fringe - go to 1.1

1.1 Is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

NO - Saltwater Tidal Fringe (Estuarine)

l Jyour wetland can be classified as a Freshwater Tidal Fringe use the forms for **Riverine** wetlands. If it is Salewater Tidal Fringe it is an **Estuarine** wetland and is not scored. This method **cannot** be used to YES - Freshwater Tidal Fringe score functions for estuarine wetlands.

The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit.

NO 2 go to 3

YES - The wetland class is Flats Tyour wetland can be classified as a Flats wetland, use the form for Depressional wetlands.

3. Does the entire wetland unit meet all of the following criteria?

The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size,

___At least 30% of the open water area is deeper than 6.6 ft (2 m).

YES – The wetland class is Lake Fringe (Lacustrine Fringe) 'NO } go to 4

Does the entire wetland unit meet all of the following criteria?

The wetland Is on a slope (slope can be very gradual),

The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks, The water leaves the wetland without being impounded.

NO / go to 5

YES - The wetland class is Stope

shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft NOTE: Surface water does not pond in these type of wetlands except occasionally in very small and deep).

Does the entire wetland unit meet all of the following criteria?

The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,

The overbank flooding occurs at least once every 2 years.

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Wetland name or number

NO)—go to 6

YES – The wetland class is Riverine ——YOTE. The With water when the river is not flooding

surface, at some time during the year? This means that any outlet, if present, is higher than the interior 6. Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the of the wetland.

NO - go to 7

YES - The wetland class is Depressional

maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural Is the entire wetland unit located in a very flat area with no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be ۲.

NO - go to 8

YES - The wetland class is Depressional

classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the Your wetland unit seems to be difficult to classify and probably contains several different HGM wetland unit being scored. œ

NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

HGM class to use in rating	Riverine	Depressional	Lake Fringe	Depressional		Depressional	Riverine	Treat as	ESTUARINE
HGM classes within the wetland unit being rated	Stope + Riverine	Slope + Depressional	Slope + Lake Fringe	Depressional + Riverine along stream	within boundary of depression	Depressional + Lake Fringe	Riverine + Lake Fringe	Salt Water Tidal Fringe and any other	class of freshwater wetland

lf you are still unable to determine which of the above eriteria apply to your wetland, or if you have more than 2 HGM classes within a wetland boundary, classify the wetland as Depressional for the

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b þ M O Wortland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points #1 Wortland is a flat deprecation (QUESTION 7 on key), whose outlet is a permanently flowing ditch. DA.3. The sold is a flat deprecation for definitional is true clay or true organic (use NRCS definitions)/ros #4 No (OO) DA.3. Characterizing and distributional percification flowers (Fenegent, Scrub-shrub, and/or Forcested Cowardh claypeak); Workland has percistent, ungrazed, plants > 55% of area Points #3 Wortland has percistent, ungrazed, plants > 2% of area Points = 3 Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. Propriet C. points A. points A. points = 2 points ≈ 1 Add the points in the boxes above Water Quality Functions - Indicators that the site functions to improve water quality points = 4 D 1.1. Chanadcoldists of surface water outflows from the werland: Wetland is a dopression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlot). DEPRESSIONAL AND FLATS WETLANDS Wetland has persistent, ungrazed, plants > % of area Wetland has persistent, ungrazed plants > ½, of area Wetland has persistent, ungrazed plants > ½, of area Wetland has persistent, ungrazed plants >½, of area D.4. Characteristics of exercent pending or Inundation: This is the area that is pended for at least 2 months. See description in manual. Area seasonally pended is > % total area of wetland D 1.0. Does the site have the potential to improve water quality? Area seasonally ponded is > 1/2 total area of wetland Area seasonally ponded is < 1⁄2 total area of wetland Total for D 1

D 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the	ine water that is on the	
303(d) list?	Ves = 1 No (o
D 3.2, is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list?	7 Yes(=2 No=0	
D 3.3, Has the site been identified in a watershed or local plan as important for maintaining water quality ignswer YES	g water quality (quswer YES	7
if there is a TMDL for the basin in which the unit is found)?	Yeste Z No = 0	,
Total for D 3	Add the points in the boxes above	Μ
Rating of Value If score is: 2.4 = H 1 = M 0 = L Record	Record the rating on the first page	

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Wetland name or number_

DEPRESSIONAL AND FLATS WETLANDS

Mydrologic Functions - Indicators that the site Functions to reduce flooding and stream degradation D.4.0. Does the site have the potential to reduce flooding and erosion?	co
D 4.1. Characteristics of surface water outflows from the weeking: Weekind is a depression or flat depression with no surface water leaving it (no outlet) Weekind has an intermittently flowing stream or lately. On Rightly constitied permanently flowing outletpoints = 1, Weekind is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing datch points = 1. Weekind has an unconstitied, or slightly constitieds, surface outlet that is permanently flowing points = 0.	7
D 4.2. <u>Death of steintee during wet periods:</u> Estimate the helpin of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if thy, the deepest part. Naries of ponding are 3 ft or more above the surface or bottom of outlet Naries of ponding botween 2 ft to < 3 ft from surface or bottom of outlet Naries are all toxt 0.5 ft to < 2 ft from surface or bottom of outlet The wetland is a "tox outlet" points = 3 The wetland is a "tox outlet" points = 3 Wetland is the but has small depressing on the surface that trap water Naries of ponding loss than 0.5 ft (6 in).	0
D4.3. Contribution of tho wordland to stonge in the watershed; Estimate the ratio of the area of upstream basin contributing surface waters to the wetland to the area of the wetland unit itself. The area of the basin is less than all of meet the area of the unit The area of the basin is 10 to 100 times the area of the unit The area of the basin is not of times the area of the unit The area of the basin is more than 100 times the area of the unit Entire wetland is in the Flats data.	≪
Total for D4 Add the points in the baxes above State Potential if score is: 12-16=H 6-11=M 6-5=1 Record the rating on the first page	Pert pag
D.S.O. Does the landscape have the potential to support hydrologic functions of the site? 10.5.L. Does the wetland recolve stormwater discharges?	
D.5.2. is >10% of the area within 150 it of the wetland in land uses that generate excess runoff? Yes (1) 0 = 0 D.5.3. is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at 15 the sedence-facultus, etc.)?	0
Add the points in t	first pag
vided by the site valuable to society?	
<i>hat best matches com</i> <i>tore than one conditio</i> t into areas where flo	
Flooding occurs in a sub-basin that is immediately down-gradient of unit. Surface flooding pooleness are in a sub-basin farther down-gradient. Points of flooding problems are in a sub-basin flooding from groundwater is an issue in the sub-basin. Flooding from groundwater is an issue in the sub-basin. The existing or potential outflow from the wordand is so constrained by human or natural conditions that the water stored by the wetland cannot reach areas that flood. Explain why	
There are no problems with flooding downstream of the wetland. D6.2. Has the die boon identified as immediant for flood struma and flood strumance in a confersal flood answer.	
\frac{1}{2} Tool and the production as important for 1000 \$500 age or 1000 conveyance in a regional 1000 control bank. In (0)	၁
Total for D 6	,,,,,

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R 1.0. Does the site have the potential to improve water quality? R 1.1. Area of surface depressions within the Riverine vetland that can trap sediments during a fleading event: Depressions cover > 1/2 and of wetland Depressions present but cover < 2/2 area of wetland Depressions present but cover < 2/2 area of wetland Depressions present but cover < 2/2 area of wetland No depressions present but cover < 2/2 area of the wetland Trees or shrube > 1/2 area of the wetland Trees or shrube > 1/2 area of the wetland Herbaceous plants (> 6 in high) > 1/2 area of the wetland Herbaceous plants (> 6 in high) > 1/2 area of the wetland Herbaceous plants (> 6 in high) > 1/2 area of the wetland Trees or shrube > 1/2 area of the wetland Herbaceous plants (> 6 in high) > 1/2 area of the wetland Trees or shrube > 1/2 area of the wetland Herbaceous plants (> 6 in high) > 1/2 area of the wetland Herbaceous plants (> 6 in high) > 1/2 area of the wetland Herbaceous plants (> 6 in high) > 1/2 area of the wetland Herbaceous plants (> 6 in high) > 1/2 area of the wetland Trees or shrube > 1/2 area of the wetland Trees or shrube > 1/2 area of the wetland Herbaceous plants (> 6 in high) > 1/2 area of the wetland Herbaceous plants (> 6 in high) > 1/2 area of the wetland Herbaceous plants (> 6 in high) > 1/2 area of the wetland Herbaceous plants (> 6 in high) > 1/2 area of the wetland Herbaceous plants (> 6 in high) > 1/2 area of the wetland Herbaceous plants (> 6 in high) > 1/2 area of the wetland Herbaceous plants (> 6 in high) > 1/2 area of the wetland Herbaceous plants (> 6 in high) > 1/2 area of the wetland Herbaceous plants (> 6 in high) > 1/2 area of the wetland Herbaceous plants (> 6 in high) > 1/2 area of the wetland Herbaceous plants (> 6 in high) > 1/2 area of the wetland Herbaceous plants (> 6 in high) > 1/2 area of the wetland Herbaceous plants (> 6 in high) > 1/2 area of the wetland Herbaceous plants (> 6 in high) > 1/2 area of the wetland Herbaceous plants (> 6 in high) > 1/2 area of the w	Water Quality Functions - Indicators that the site functions to improve water quality	prove water quality
1.1. Area of surface dependence within the Riverine wetland that can trap sediments during a flooding event: Deprecisions coore > 2/4 area of wethand Deprecisions cover > 3/4 area of wetland Deprecisions scover > 3/4 area of wetland Deprecisions scover > 3/4 area of wetland No deprecisions present but cover < 2/4 area of wetland Trees or shrubs > 3/4 area of the wetland Trees or shrubs > 3/4 area of the wetland Trees or shrubs > 3/4 area of the wetland Trees or shrubs > 3/4 area of the wetland Trees or shrubs > 3/4 area of the wetland Trees or shrubs > 3/4 area of the wetland Trees or shrubs > 3/4 area of the wetland Trees or shrubs > 3/4 area of the wetland Trees or shrubs > 3/4 area of the wetland Trees or shrubs > 3/4 area of the wetland Trees or shrubs > 3/4 area of the wetland Trees or shrubs > 3/4 area of the wetland Trees or shrubs > 3/4 area of the wetland Trees or shrubs a shrubs of the wetland Trees shrubs, and ungrazed herbacoous < 3/4 area of the wetland Trees shrubs, and ungrazed herbacoous < 3/4 area of the wetland Trees shrubs, and ungrazed herbacoous < 3/4 area of the wetland Trees shrubs, and ungrazed herbacoous < 3/4 area of the wetland Trees shrubs, and ungrazed herbacoous < 3/4 area of the wetland Trees, shrubs, and ungrazed herbacoous < 3/4 area of the wetland Trees, shrubs, and ungrazed herbacoous < 3/4 area of the wetland Trees, shrubs, and ungrazed herbacoous < 3/4 area of the wetland Trees, shrubs, and ungrazed herbacoous < 3/4 area of the wetland Trees, shrubs, and ungrazed herbacoous < 3/4 area of the wetland Trees, shrubs, and ungrazed herbacoous < 3/4 area of the wetland Trees, shrubs, and ungrazed herbacoous < 3/4 area of the wetland Trees, shrubs and ungrazed or the potential if score is:	R 1.0. Does the site have the potential to improve water quality?	
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signs present but cover < % area of wetland signs present but cover < % area of wetland signs present but cover < % area of wetland re of plants in the wetland (areas with >90% cover at person holefut, not Cowardin of we shares > 1/s area of the wetland areas plants (> 6 in high) > 1/s area of the wetland shubs, and ungrazed hetbal > 1/s area of the wetland shubs, and ungrazed hetbal > 1/s area of the wetland shubs, and ungrazed hetbal > 1/s area of the wetland Add the points in the boxes above Add the points in the boxes above Add the points in the boxes above Add the points in the boxes above Add the points in the boxes above the last 10% of the contributing basin to the wetland falled fields, pdstures, or forest that ha the last 5 years? ### Contributing basin to the wetland in landpdices that generate pollutants? ### Wortho area within 150 ft of the wetland in landpdices that generate pollutants? ### Wortho area within 150 ft of the wetland in landpdices that generate pollutants? ### Wortho area within 150 ft of the wetland in landpdices that generate pollutants? #### Wortho area within 150 ft of the wetland in landpdices that generate pollutants? #### Wortho area within 150 ft of the wetland in landpdices that generate pollutants? #### Worthouse of pollutants coming into type wetland that are not listed in question for the application of the points wetland along a stream of river that is on the 303(d) list or on a tibutary that drains #### Besond identified in a watershed or local plan as important for maintaining water ##### Add the points ##### Add the points ###################################	Depressions cover > 7,4 area of wetland	points ≈ 8
sons present but cover < % area of worthand executed by the present but cover < % area of worthand present to plants in the wettand (areas with >90% cover at person height, not Cowardin or a rahube > ½ area of the wetland a real but be yet, area of the wetland shrube > ½ area of the wetland abrubes > ½ area of the wetland abrubes > ½ area of the wetland abrubes > ½ area of the wetland abrubes > ½ area of the wetland abrubes > ½ area of the wetland abrubes > ½ area of the wetland abrubes > ½ area of the wetland abrubes > 2 and ungrazed herbaccous < ½, area of the wetland abrubes above above abrubes and ungrazed herbaccous < ½, area of the wetland abrubes above above abrubes and ungrazed city or within its UGA? Wetland solve the potential to support the water quality function of the teat 10% of the contributing basin to the wetland indude a UGA or incorpagated area? Wetland solve survers of pollutants coming into the wetland liniand fired that are not libred in question of the sarea within 150 ft of the wetland in langdies that generate pollutants? Water quality improvement provilede by the site valuable to society? Water quality improvement provilede by the site valuable to society? Wetland along a stream of river that is on the 303(d) list or on a tibutary that drains a wetland along a stream of river that is on the 303(d) list or on a tibutary that drains are been indentified in a watershed or local plan as important for maintaining water before \$60 Tibut to the drainage of which the the unit is found) Add the polars	Depressions cover > ½ area of wetland	points = 4
recisions precent re of plants in the wetland (areas with >90% cover at person holeht, not Cowardin c re of plants in the wetland or shrube > ½, area of the wetland or shrube > ½, area of the wetland or shrube > ½, area of the wetland abous plants (> 6 in high) > ½, area of the wetland abous plants (> 6 in high) > ½, area of the wetland Aed the polnts. In the baxes abous Aed the polnts in the baxes abous Aed the polnts in the baxes abous the landscape have the potential to support the wetland Aed the polnts in the wetland in the baxes abous the landscape have the potential to support the water quality fupction of the vetland within an incorporated city or within its UGA? The landscape have the potential to support the water quality fupction of the vetland within an incorporated city or within its UGA? The landscape have the potential to support the water quality fupction of the vetland within an incorporated city or within its UGA? We fit and the contributing basin contain tillod fields possures, or forests that ha the last 5 years? We fit to area within 150 ft of the weetland in landsdass that generate poliutants? We or the ources of poliutants coming into the wetland that are not listed in question Wetland along 3 stream of river that is on the 303(d) list or on a tributary that drains wetland along 3 stream of river that is on the 303(d) list or on a tributary that drains wetland along 4 stream of river that has TMDL limits for nutrients, toxics, or pathogo as the beef identified in a watershed or local plan as important for maintaining water Match to polnts Add the polnts Add the polnts	Depressions present but cover < χ area of wetland	points = 2
re of plants in the weetand (areas with >90% cover at person holefit, not Cowardin or ** Annue** - 5, area of the weetand creaus plants (> 6 in high) > 7, area of the weetand creaus plants (> 6 in high) > 7, area of the weetand about plants (> 6 in high) > 7, area of the weetand about plants (> 6 in high) > 7, area of the weetand about plants (> 6 in high) > 7, area of the weetand about an ungraced hereboxes solve weetand an incorporated sit weetand in the boxes above Add the polints in the boxes above Add the polints in the boxes above and incorporated sit yor within the UGA? The landscape have the potential to support the water quality fupetion of the contributing basin to the weetand include a UGA or incorporated area? The land solve to the weetand include a UGA or incorporated area? The last 10% of the contributing basin contain falled fields, potentiar, or forest that ha the last 5 years? The last 5 years? We find area within 150 ft of the weetand in landsdaces that generate poliutants? The open solve sources of pollutants coming into the weetland that are not listed in question of ources. Add the polits weetland along stream of river that is on the 303(d) list or on a tributary that drains weetland along stream of river that is on the 303(d) list or on a tributary that drains eithe beef identified in a watershed or local plan as important for maintaining water phace is 60 TMCL for the drainage in which the unit is found) Add the politics Add the politics are the poef identified in a watershed or local plan as important for maintaining water the politics.	No doprossions present	points = 0
we should be 2% area of the westland becouse 2% area of the westland boous plants (5 of in high) 2% area of the westland boous plants (5 of in high) 2% area of the westland abous plants (5 of in high) 2% area of the westland abrubes, and ungrazed herbaceouse 2% area of the westland abrubes above 18 because	3 1.2. Structure of plants in the wetland (areas with >90% cover at person height, not Cowa	_
re shulbs = "/", area of the wortland seaus plants (5 6 in light) = 7, area of the wetland shrubs, and ungrazed herbaceous < "/", area of the wetland Add the points in the boxes above Add the points in the boxes above Add the points in the boxes above Add the points in the boxes above Add the points in the boxes above Add the points in the water quality function of the related within an incorporated city or within its UGA? To contributing basin to the wetland include a UGA or incorporated area? A of the area within 150 ft of the wetland include a UGA or incorporated area? A of the area within 150 ft of the wetland in languages that generate pollutants? A of the area within 150 ft of the wetland in languages that generate pollutants? Water quality improvement in the box wetland that are not listed in question of a strain in the language at the strain of river that is on the 303(d) list or on a tributary that drains wetland along a stream of river that is on the 303(d) list or on a tributary that drains are been densitied in a watershed or local plan as important for maintaining water phere is winch the points Add the points Add the points Add the points	Troes or shrubs $> \frac{2}{3}$ area of the wetland	
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sinubs, and ungrazed herbaccous https://s.area.of.newationd sinubs, and ungrazed herbaccous https://s.area.of.newationd Add the boling in the boxes above the landscape have the petential to support the water quality function of the verband within an incorporated city or within its uSGA? to contributing basin to the westand include a UGA or incorporated area? the last 5 years? % of the area within 150 ft of the westand in landsdies that generate pollutants? so other sources of pollutants coming into the wetland that are not littled in question of the pollutants of the last in the pollutants of the last in the last in the last in the last in the last in the last in the last in the last in the last in the last in the last in the last in the last in the last in the maintaining water there is on the drainage in which the unit is found? Add the polity has expected or local plan as important for maintaining water have is on the polity. Add the polity in the drainage in which the unit is found? Add the polity in the drainage in which the unit is found? Add the polity in the drainage in which the unit is found?	Herbaceous plants (> 6 in high) > 2 /, area of the wetland	polytera 6
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Add the points in the boxes above Hoterntal if score is12-36 = H6-11 = M0-5 = H The landscape have the potential to support the water quality function of the verband within an incorporated city or within its UGA? To contributing basin to the wetband include a UGA or incorporated area? We fee area 10% of the contributing basin contain tilled fields, pastures, or forests that ha the last 5 years? We of the area within 150 ft of the wetband in lands/see that generate pollutants? We of the area within 150 ft of the wetband in lands/see that generate pollutants? We of the area within 150 ft of the wetband in lands/see that generate pollutants? Add the pollutants coming into the wetband that are not listed in question of controls. Add the pollutants are seen in the 303(d) list or on a tributary that drains wetband along a stream of river that is on the 303(d) list or on a tributary that drains are been in dentified in a watershed or local plan as important for maintaining water there is or the drainage of which the unit is found). Add the polnts	shrubs, and ungrazed herbac	points = 0
Is Potential if score is12-16 # H6-11 # M0-5 # L		
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votand within an incorporated city or within its UGA? To contributing basin to the wetand include a UGA or incorporated area? It least 10% of the contributing basin contain tillod fields, posstures, or forests that have the last 5 years? % of the area within 150 ft of the wetland in languages that generate pollutants? No other sources of pollutants coming into the wetland that are not listed in question sources of pollutants coming into the wetland that are not listed in question descape Potential if score is: 3% = H	3.2.0. Does the landscape have the potential to support the water quality function	the site?
no contributing basin to the wetland include a UGA or incorporated area? It least 10% of the contributing basin contain tilled fields, passtures, or forests that has the last 5 years? % of the area within 150 ft of the wetland in languages that generate pollutants? we other sources of pollutants coming into the languages that generate pollutants? Add the points independential if score it: 36 = H	3.2.1. Is the wetland within an incorporated city or within its UGA?	Yes#2 No#0
t least 10% of the contributing basin contain tillod fields, pastures, or forests that has the last by soars? % of the area within 150 ft of the wetland in languages that generate pollutants? The other sources of pollutants coming into the wetland that are not listed in question sources of pollutants coming into the wetland that are not listed in question decape Potential if score it:	3.2.2. Does the contributing basin to the wetland include a UGA or incorporated area?	Yes = 1 No = 0
We of the area within 150 ft of the wetland in langidizes that generate pollutants? Sources Add the judicants coming into the wetland that are not listed in question controes Add the points in decrease of pollutants coming into the wetland that are not listed in question decrease Potential if score is: Source is: Add the points in question and the site is on the 303(d) list or on a tributary that drains the version of their that has TMDL limits for nutrients, toxics, or pathogor is also been defined in a watershod or local plan as important for maintaining water there is the the draining of in which the unit is found) Add the points in which the unit is found.	3.2.3. Does at least 10% of the contributing basin contain tilled fleids, pastures, or forests ti within the last 5 years?	thave been clearent Yes = 1 No = 0
sources Add the points Add the points in question Add the points in decrease of poliutants coming into the wetland that are not listed in question Add the points in decrease between the provided by the site valuable to society? Wetland along a stream of river that is on the 303(d) list or on a tributary that drains the tributand along a stream or river that has TMDL limits for nutrients, toxics, or pathogor wetland along a stream or river that has TMDL limits for nutrients, toxics, or pathogor is also been into the draining water the been decreased in the draining water that grain is in the draining water that grain is in the points	3.2.4. Is > 10% of the area within 150 ft of the wetland in languages that generate pollutant	
Add the points in decape Potential if score is: 36 = H	R.2.5. Are there other sources of pollutants coming into the wetland that are not listed in q Other sources	stions R 2.1-R 2.4 Yes = 1 No = 0
decape Potential if sone it:		nts in the boxes above
R 3.0. Is the water quality improvement provided by the site valuable to society? R 3.1. Is the wetland along a stream of river that is on the 303(d) list or on a tributary that drains to one within 1 mi? Ves = 1. No = 0 R 3.2. Is the wetland along ystream or river that has TMDL limits for nutrients, tookes, or pathogens? R 3.2. Is the wetland along ystream or river that has TMDL limits for nutrients, tookes, or pathogens? Ves = 1. No = 0 R 3.4. Has the site book identified in a watershed or local plan as important for maintaining water quality? (canver Yes! if these 66 TMDL for the drainage in which the unit is found) Ves = 2. No = 0 V	10r2=M	Record the rating on the first.
R 3.1. Is the wetland along a stream of river that is on tho 303(d) list or on a tributary that drains to one within 1 mi? Yes = 1. No = 0 R 3.2. Is the wetland along ystream or river that has TMDL limits for nutrients, tookes, or pathogens? R 3.4. Has the else beof identified in a watershed or local plan as important for maintaining water quality? (caravor Yes # 1 No = 0) Yes # 51 there of TMDL for the drainage in which the unit is found) Add the points in the boxes above Add the points in the boxes above	R 3.0, is the water quality improvement provided by the site valuable to society?	
vetland along 3/stream or river that has TMDL limits for nutrients, toxics, or pathogens? e slee beef identified in a watershed or local plan as important for maintaining water quanter is see that for the dreinage in which the unit is found. Add the points in the	R 3.1. is the wetland along a stream of river that is on tho 303(d) list or on a tributary that	ins to one within 1 mi?
vetland along y'stream or river that has TMDL limits for nutrients, toxics, or pathogene? to site been identified in a watershed or local plan as important for maintaining water quanter site TMDL for the dreinage in which the unit is found) Add the points in the		
e site beek leantified in a watershed or local plan as important for maintaining water qu there ise TMDL for the dreinage in which the unit is found) Add the points in the	R 3.2. Is the wetland along x/stream or river that has TMDL limits for nutrients, toxics, or pa	
	R.3.3. Has the site been identified in a watershed or local plan as important for maintaining VES if there is a TAIDL for the drainage in which the unit is found)	ator quality? (answer
		nts in the boxes above

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RIVERINE AND FRESHWATER TIDAL FRINGE WETLANDS Hydrologic Functions - Indicators that site functions to reduce flooding and stream erosion	IGE WETLANDS ce flooding and stream erosion
R 4.0. Does the site have the potential to reduce flooding and erosion?	
R4.1. Characteristics of the overbank storage the wetland provides:	
essimate are average whath of the weadna perpendicular to the election of the flow and the world of the stream or triber channel allstance between banks). Calculate the ratio: (average width of wedand)/(average with of elections between the contract of	ne Jiaw and the Walth of the ige width of wetland!/(average
If the ratio is more than 20	o a xeloco
if the ratio is 10-20	9 = pujod
if the ratio is 5-<10	points = 4
if the ratio is 1-45	points = 2
If the ratio is < 1.	points = 1
R 4.2. Characteristics of plants that slow down water velocities during floods: Treat, large woody debris as forest or	Jarge woody debris as forest or
shrub. Choose the points appropriate for the best description (polygons, need to have >50% cover at person	to have >90% cover at person
Forest or shrib for > 1/2 area OR emergent plants > 2/2 area	7 a staton
Forest or shrub for > 1/1, area OR emergent plants > 1/1, area	2 mstojoo
Plants do not meet above criteria	0 m spilos
	Add the points in the boxes above
Rating of Site Potential If score is: 12-16 # 14 6-11 # M0-5 # L	Record the rating on the first page
R 5.0. Does the landscape have the potential to support the hydrologic functions of the site?	tions of the site?
R.S.1. is the stream or river adjagent to the wetland downcut?	Yes # 0 No = 1
R 5.2. Does the up-gradiopt watershed include a UGA or Incorporated area?	Yesel Now0
R 5.3. is the up-gradent stream or rivor controlled by dams?	Yes=0 No=1
Total for R 5	Add the points in the boxes above
Rating of Landscape Potential if score is: 3 = H1 or 2 = M0 = 1	Record the rating on the first page
R 60. Are the hydrologic functions provided by the site valuable to society?	
R 6.1. Distance to the nearest areas downstream that have flooding problems?	
Choose the description that best jits the site. The cubback lamped plants of plants at the western's bee Specifican that secult in duminants	the same much as firstern worth some
human or natural resources (e.g., houses or salmon redds)	mis that reserving damage to
Surface flooding problems are in a sub-basin farther down-gradient	points # 1
No flooding problems anywhere downstream	points ≈ 0
R 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan?	se in a regional flood control plan?

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ands of all HGM classes. rovide important habitat	ind strate within the Forested class. Check the combined for each class to meet the threshold Add the number of structures checked. 4 structures on more; points: 4 3 structures; points: 4 2 structures; points: 4 1 1 structure; points: 4 1 1 structure; points: 60 1 stru	wetland. The water regime has to cover explores of hydroperiods. 4 or more types present points = 3 3 types present points = 1 2 types present points = 1 4 type present points = 2 5 points 2 points 2 points	the size threshold and you do not have to name , purple loosestrife, Canadian thistie points = 2 points = 0 points = 0	Cowardin plants classes (described in H.11), or utilitate) is high, moderate, low, or none. If you the rating is always high. Moderate = 2 points
These questions apply to wetlands of all HGM classes. HABITAT FUNCTIONS - Indicators that site functions to provide important habitat H 1.0. Does the site have the potential to provide habitat?	H 1.1. Structure of plant community; indirators are Cowardin descess and strate within the Forested class. Chack the Cowardin plant classes in the wetland, Up to 10 patches may be combined for each class to meet the threshold of 50 corners than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures or meet points 4 4 structures or more; points 4 4 structures or more; points 4 5 cornel-should class where shows > 30% cover) Vision before the class where trees have > 30% cover) 2 structures; points 4 2 cornected class; where trees have > 30% cover) 2 structures; points 4 2 cornected class; where trees have > 30% cover) 2 structure; points 6 1 struc	H 1.2. Hydroperiods Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover within the vetland. The water regime has to cover were than 1000 for the wetland of a fix as to count (see text for descriptions of hydroperiods). Permanently flooded or inundated Seasonally flowing stream or rivor in, or adjacent to, the wetland Seasonally flowing stream in, or adjacent to, the wetland Freshwater tidal wetland Z point Permanently flowing stream in, or adjacent to, the wetland Seasonally flowing stream in, or adjacent to, the wetland The permanently flowing stream in, or adjacent to, the wetland Seasonally flowing stream in, or adjacent to, the wetland Seasonally flowing stream in, or adjacent to, the wetland Seasonally flowing stream in, or adjacent to, the wetland Seasonally flowing stream in, or adjacent to, the wetland Seasonally flowing stream in, or adjacent to, the wetland Seasonally flowing stream in, or adjacent to, the wetland Seasonally flowing stream in, or adjacent to, the wetland Seasonally flowing stream in, or adjacent to, the wetland	H 13. Richnoss of plant species Count fro number of plant species Count fro number of plant species in the workand that cover at least 10 ft², Different pather of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfolt, reed canarygrass, purple loosestrife, Canadian thistle if you counted; - 19 species If you counted; - 19 species 5 - 19 species C 5 species points = 2, points	H 14. Interspection of habitats Dodde from the diagrams below whether interspection among Cowardin plants classes (described in H 11.), or the classes and unwegeshed areas (an include open water or muditat) is high, moderate, low, or none, if you have jour or more plant classes or three classes and open water, the rating is always high. Nonge parts Nonge parts All three diagrams All three diagrams In this row, and the classes of three parts are a muditation of the points. Moderate = 2 points All three diagrams All three diagrams

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Wetland name or number

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Record the rating on the first page
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C
Record the rating on the first page
N
Record the rating on the first page

WDFW Priority Habitats

Princity Inditates Listed by WDFW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Watshipper Department of Fish and Wildlife, 2008. Priority Habitat and Species List. Olympia, Washington. 1777 pp. http://wdfw.wa.gov/publicritions/DD/65/wdfwgQu65.pdf or access the list from here: http://wdfw.wa.gov/conservations/DD/65/wdfwgQu65.pdf or access the list from here:

Counthow many of the following priority habitats are within 330 ft (100 m) of the wetland unit. NOTE: This question is independent of the land use between the wetland unit and the priority habitat.

- Aspen Stands: Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- Blodiversity Areas and Corridors: Areas of habitat that are relatively important to various species of native fish and
 wildlife (full descriptions in WDFW PHS report).
- Herbaccous Balds: Variable size patches of grass and forbs on shallow solls over bedrock.
- Old-growth/Mature forests: <u>Old-growth west of Gasande grost</u> Stands of at least 2 tree species, forming a multilayered canopy with occasional small openings; with at least 8 trees/ac (20 troes/ha) > 22 in (81 cm) dbh or > 200
 years of ago, <u>Matura Georats</u> Stands with average diameters exceeding 21 in (53 cm) dbh; crown cover may be less
 than 100% decay, decadence, numbers of stags, and quantity of large downed material is generally less than that
 found in old-growth; 80-200 years old west of the Cascade crest.
- Oregon White Oak: Woodland stands of pure oak or oak/oonlidr associations where canopy coverage of the oak Joseponent is important (full descriptions in WDFW PHS report p. 158 – see web link abow?).
- Riparian: The area adjacent to aquatic systems with Bowing water that contains elements of both aquatic and terrestrial coosystems which mutually influence each other.
- Westside Prairies: Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (still descriptions in WDFW PHS report p. 161 see web link above).
- Instream: The combination of physical, biological, and chomical processes and conditions that interact to provide
 functional Iffe history requirements for instream fish and wildlife resources.
- Nearshore: Relatively undisturbed nearshore habitats. These Include Coastul Nearshore, Open Coast Nearshore, and
 Puget Sound Nearshore. (full descriptions of habitats and the definition of relatively undisturbed are in WDFW report see web link on previous page).
- Gaves: A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, reck, ico, or other geological formations and is large enough to contain a human.
- Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.
- Tailus: Homogenous areas of rock rubble ranging in average size 0.5 6.5 it (0.15 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap sildes and mine Enlings. May be associated with eliffs.
 - Snaps and Logs: Trees are considered snaps if they are dead or dying and exhibit sufficient deary characteristics to enable carvity excavation/use by wildlife. Priority snaps have a diameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 it (6 m) long.

Note: All vegetated wetlands are by definition a priority habiat but are not included in this list because they are addressed

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Wetland name or number ___

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

SC 4.0. Forested Wetlands	
Does the wetland have at least 1 continuous acro of forest that meets one of these enterta for the WA advantance of this and Williah forests as priority habitats? If you onswer YES you will still need to rate the warkent head on he functions	
— Ott-growth forests (word of Cascade orest); Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at least 200 years of age OR have a diameter at broast height (dbh) of 32 in (81 cm) or more. — Mature forest (west of the Cascade Orest); Stands where the largest trees are 80-200 years old OR the construction of the Cascade Orest); Stands where the largest trees are 80-200 years old OR the construction of the Cascade Orest); Stands where the largest trees are 80-200 years old OR the	
years and make up and compay have an average distincted (but) concerning at it (150 cm). Yes = Category !	Cet.
SC 5.0. Wetlands in Coastal Lagoons Doors the worker of the collection or the control of a constitution of a constitutio	
Local for wealant index and that bollowing criteria to a wretaint in a coastal agroom: — The weetland lifes in a depression adjacent to martine waters that is wholly or partially separated from marine waters by sandbalks, gravel banks, shingle, or, less frequently, rocks	
— Tho lagoon in which the wetland is located contains ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (neeps to be measured near the bottom).	- te
SC 5.1. Does the wetland meet all of the following three conditions?	
— The wetland is relatively undisturbed (has no diking, ditching, filling, cuitivation, grazing), and has less	į
than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). — At least % of the landward edge of the wotland has a 100 ft buffer of shorts, for un-orayed or un-	3
mowod grassland.	
The weddind is larger than 7/10 ac (4350 ft") Yes = Category 1 No = Category II	
SC 6.0. Interdunal Wetlands	
is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? If you answer yes you will still need to rate the wetland based on its habiter functions.	
In practical terms that means the following geographic areas:	
— Grayland-Westport; Lands west of SR 105	ğ
— Geean Shares-Copaliz: Lands west of SR 115 and SR 109 Yes – Go to SC 6.1 / No – yot an Intordunal westand for rating	
ores an 8 or 9 for the habitat functions on the form (rate	Cat:
ion the universappees of influencing. SC 6.2. Is the wetland 1 ac or larger, or Is it in a mosale of wetlands that is 1 ac or larger?	
Yes = Catagory II No = Go to SC 6.3 SC 6.3. Is the unit between 0.1 and 1 ac. or is it in a mocale of workands that it horwoon 0.1 and 1 ar?	Cet.
Yes = Category III No = Category IV	Cat. I∨
Oztagory of wetland based on Special Characteristics if you answered No for all types, enter "Net Applicable" on Summary Form	₹ 2

Wetland name or number

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RATING SUMMARY – Western Washington

Name of wetland (or ID #): L. works with the stated by Ecology A Yes No Date of training 2015 Date of site visit: 5 4 22 Wetland has multiple HGM classes? Y HGM Class used for rating くしらん

NOTE: Form is not complete without the figures requested (figures can be combined). Source of base aerial photo/map

OVERALL WETLAND CATEGORY (based on functions or special characteristies)

1. Category of wetland based on FUNCTIONS

Category III - Total score = 16 - 19 €Category II – Total score = 20 - 22 Category IV - Total score = 9 - 15 _Category I - Total score = 23 - 27

FUNCTION	ੋਂ ≶	npro ter Q	ying Vallen	£	droj	Hydrologic		Habita	#	
					Direle	Circle the appropriate r	propri	ate ro	tings	
Site Potential	I	$\overline{\mathbf{s}}$		I	Σ	Þ	x	Σ	2	
Landscape Potential	Ή	(3		I	Σ	$\bar{\mathbb{Q}}$	x	Σ	9	
Value	Ê	Σ		I	[₹]	7 .	Ξ	Σ		TOTAL
Score Based on Ratings	·	4			1		L	lω		29

CHARACTERISTIC	CATEGORY
Estuarine	II I
Wetland of High Conservation Value	Ĭ
Bog	I
Mature Forest	I
Old Growth Forest	-
Coastal Lagoon	II II
Interdunal	л шп
None of the above	7

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Score for each function based on three ratings (order of ratings is not important)

9 = H,H,H 8 = H,H,M 7 = H,H,L 7 = H,H,L 6 = H,M,L 6 = M,M,M 5 = H,H,L 5 = M,M,L 4 = M,L,L 3 = E,L,L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	II I
Wetland of High Conservation Value	I
Bog	ĭ
Mature Forest	ı
Old Growth Forest	,
Coastal Lagoon	II II
Interdunal	л ш п
None of the above	7

Wetland name or number

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of	To answer questions: Fig.	Figure #
Cowardin plant classes	D13, H1.1, H1.4	
Hydroperiods	D1.4, H1.2	
Location of outlet (can be added to map of hydroperiods)	D11, D4.1	
Boundary of area within 150 ft of the wetland (can be added to another figure) D 2.2, D 5.2	0 2.2, 0 5.2	
Map of the contributing basin	04.3, 05.3	
1 km Polygon: Area that extends 1 km from entire wetland edgo - including	H21, H22, H2.3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website) D 3.1, D 3.2	D3.1, D3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D3.3	

Riverine Wetlands

Map of the second secon	To answer questions: Figure #	are #
Cowardin plant classes	H1,1, H1,4	
Hydroperiods	H1.2	
Ponded depressions	RII	
Boundary of area within 150 ft of the wetland (can be added to another flaure)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R1.2, R4.2	
Width of unit vs. width of stream (can be added to another flaure)	84.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	[
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H21, H22, H23	ľ
polygons for accessible habitatiand undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R3.1	
Screen capture of list of TMOLs for WRIA in which unit is found (from web)	R3.2, R3.3	

Lake Fringe Wetlands

Map of	To answer questions: Figure #	# 0
Cowardin plant classes	L1.1, L4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	11.2	Γ
Boundary of area within 150 ft of the wetland (can be added to another figure) L2.2	L2.2	Γ
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website) [13.1, 13.2]	L3.1, L3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L3,3	Γ

Slope Wetlands

Mapoft	To answer questions:	Figure #
Cowardin plant classes	H1.1, H1.4	
Hydroperiods	H1.2	
Plant cover of dense trees, shrubs, and herbaccous plants	513	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (can be edded to figure above)	54.1	
Boundary of 150 ft buffer (can be added to another figure)	\$21,55.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - Including polygons for accessible habitat and undisturbed habitat	H21, H22, H23	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	53.1,53.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	53.3	

HGM Classification of Wetlands in Western Washington

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in For questions 1-7, the criteria described must apply to the entire unit being rated

Are the water levels in the entire unit usually controlled by tides except during floods?

questions 1-7 apply, and go to Question 8.

NO Sgo to 2

YES - the wetland class is Tidal Fringe - go to 1.1

1.1 is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

NO - Saltwater Tidal Fringe (Estuarine)

fyour wetland can be classified as a Freshwater Tidal Fringe use the forms for **Riverine** wetlands. If it is Saltwater Tidal Fringe it is an Estuarine wetland and is not scored. This method cannot be used to YES - Freshwater Tidal Fringe score functions for estuarine wetlands. The entire wetland unit is flat and precipitation is the only source (>90%) of water to it Groundwater and surface water runoff are NOT sources of water to the unit

Ng - go to 3

YES - The wetland class is Flats fyour wetland can be classified as a Flats wetland, use the form for Depressional wetlands.

3. Does the entire wetland unit meet all of the following criteria?

The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size;
At least 30% of the open water area is deeper than 6.6 ft (2 m).

Does the entire wetland unit meet all of the following criteria?

N6 - go to 4

YES – The wetland class is Lake Fringe (Lacustrine Fringe)

_The wetland is on a slope (s*lope can be very gradual*), _The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks, The water leaves the wetland without being impounded.

NO - go to 5

YES →The wetland class is Slope

shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft NOTE: Surface water does not pond in these type of wetlands except occasionally in very small and deep).

Does the entire wetland unit meet all of the following criteria? ហ៎

The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,

The overbank flooding occurs at least once every 2 years.

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NO – go to 6 NOTE: The Riverine unit can contain depressions that are filled with water when the river is not flooding

surface, at some time during the year? This means that any outlet, if present, is higher than the interior is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the of the wetland. ø

NO - go to 7

YES - The wetland class is Depressional

flooding? The unit does not pond surface water more than a few inches. The unit seems to be maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural Is the entire wetland unit located in a very flat area with no obvious depression and no overbank outlet ۲.

NO - go to 8

YES - The wetland class is Depressional

classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1.7 APPLY TO DIFFERENT WHICH OF THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the Your wetland unit seems to be difficult to classify and probably contains several different HGM wetland unit being scored. ထဲ

more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area. NOTE: Use this table only if the class that is recommended in the second column represents 10% or

	* * * * * * * * * * * * * * * * * * *
How dasses within the wetigna that	HGIM Class to
peing rated	use in rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake Fringe	Lake Fringe
Depressional + Riverine along stream	Depressional
within boundary of depression	
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other	Treatas
class of freshwater wetland	ESTUARINE

If you are still unable to determine which of the above criteria apply to your wetland, or lf you have more than 2 HGM classes within a wetland boundary, classify the wetland as Depressional for the rating.

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<u>LAKE FRINGE WETLANDS</u> Water Duelly Strations - Indicates that the food of the beautiful to the second of the seco	The second secon	7
L.1.0. Does the site have the potential to improve water quality?	Anima Parist	L4.0. Does the
1.1.1. Average width of plants along the lakeshore fuse polynops of Cowardia classes?		L4.1. Distance al
Plants are more than 33 ft (10 m) wide	Doints	Choose th
Plants are more than 16 ft (5 m) wide and <33 ft	points = 3	- xofdst
Plants are more than 6 ft (2 m) wide and <16 ft	points #1	> % of dist
Plants are less than 6 ft wide	points # 0	v % distan
L1.2. Characteristics of the plants in the wetland: Choose the appropriate description that results in the highest	highest /	Plants are
points, and do not include any open water in your estimate of coverage. The herbaccous plants can be either the dominant form or no an analysis of a standard control of the control of th	an be either	rights are
of cover is total cover in the unit, but it can be in patches. Herbaceous does not include aquatic begi ^o	disco. Area	Rating of Site Po
Cover of herbaceous plants is >90% of the vogetated area	points # 6	•
Cover of herbaceous plants is >2/3 of the vegetated area	points = 4	L. 5.0. Does the
Cover of herbaceous plants is >1/3 of the vegetated area	points = 3	A CONTRACTOR CONTRACTOR
Other plants that are not aquatic bed > 7/s unit	points = 3	15,1. is the lake
Other plants that are not aquatic bed in > '/3 vegetated area	points = 1	L5.2. is the fetch
Aquatic bed plants and open water cover > 1/1 of the unit	points = 0	Total fac ! 6
Total for L.1 Add the points in the boxes above	boxes above	C TOLLINO.
Rading of Site Potential If score is: 8-12 m H 4-7 m M 0-3 m 1, Accor	Record the rating on the first page	Rating of Landso
L.2.0. Does the landscape have the potential to support the water quality function of the site?		L 6.0. Are the h
L21. is the lake used by power boats?	Yos w 1 No m 0	L6.1. Are there r
L 2.2. is > 10% of the area within 150 ft of wedand unipon the upland side in land uses that generate pollutants?	llutants?	There are.
, s	Yesmil Nomo	_
L 23. Does the lake have problems with algafolooms or excessive plant growth such as milfoli? Ye	Yesm1 Nom0	There are
Total for L 2	Soxes above	There are
Rating of Landstape Potential: If xfore is: 2 or 3 = H 1 = M 0 = L Recor	Record the rating on the first page	Rating of Value:
L 3.0. is the water quality improvement provided by the site valuable to society?		NOTES and FI
L 3.1. is the lake on the 303(d) list of degraded aquatic resources?	Yes=1 No m O	
L3.2. Is the laken a sub-basin where water quality is an issue (at least one aquatic resource in the basin is on the 303(e)/fst?	agin is on the	
1.3.3. Haz the been identified in a watershed or local plan as important for maintaining water quality? Answer YES	ve Answer YES	
Af there is a TMDL for the lake or basin in which the unit is found.	Yes = 2 No = 0	
Total for L.3	ooxes above	
Rating of Value If score is: 2-4 = H _ 1 = M _ 0 = L	Record the rating on the first page	

Wetland name or number

Hydrologic Functions - Indicators that the wetland unit functions to reduce shoreline erosion	s to reduce shoreline erosion
1.4.0. Does the site have the potential to reduce shoreline erosion? 1.4.1. Distance along shore and average width of Council in passes along the Interbury (Annex Include Americ Had).	do not had a demote had?
Choose the highest scoring description that matches conditions in the wetland.	in a series of the series of t
> % of distance is Scrub-shrub or Forested at least 33 ft (10 m) wide	points = 6
7% of distance is Scrub-shrub or Forested at loast 6 ft (2 m) wide	points = 4
We designed (5 Schub-Shrub of Forestod at least 33 ft (10 m) wide	points = 4
Plants are less than 6 ft (2 m) wide (any type except Aquatic bed)	points = 0
Rating of Site Potential: If score is; 6 = M 0.5 = 1	Record the rating on the first page
L 50. Does the landscape have the potential to support the hydrologic functions of the site?	s of the site?
L5.1. Is the lake used by power boats with more than 10,46?	Yesml Nome
L5.2. is the fetch on the lake side of the unit at least/f mile in distance?	Yes=1 No=0
Add	Add the points in the boxes above
Rating of Landscape Potential If score 12, 2 ** H 1 ** M 0 ** L	Record the rading on the first page
L 6.0. Are the hydrologic functions provided by the site valuable to society?	
L6.1. Are there resources slong the shore that can be impacted by erosion? If more than one resource is present, choose the opewith the highest score.	n one resourco is prosent,
There are fruman structures or old growth/maturo forests within 25 ft of OHWM of the share in the unit	of the share in the unit
	points # 2
There are nature tralls or other paths and recreational activities within 25 ft of OHWIM	HWM points = 1
Other resources that could be impacted by eresion	points # 1
There are no resources that can be impacted by erosion along the shores of the unit	nit points = 0

IOTES and FIELD OBSERVATIONS:

6

SLOPE WETLANDS		
Water Quality Functions - Indicators that the site functions to improve water quality	nctions to improve water quality	
S 1.0. Does the site have the potential to improve water quality?		
S.1.1. Characteristics of the average slope of the wetland: (a 1% slope has a 1 ft vertical drop in clevation for every	ft vertical drop in clevation for every	
100 ft of horizontal distance)		
Stope is 1% or less	points # 3	
Slope is > 1%-2%	points = 2	,,,,,,
Slope is > 2%-5%	points 1	
Slope is greater than 5%)o≡ striloq	
5.1.2. The soil 2, in below the surface (or duff layer) is true clay or true organic (use NRCS definitions): Yes = 3 No 40)	(use NRCS definitions): Yes = 3 No (40)	<u>ဂ</u>
S.1.3. Characteristics of the plants in the wotland that trap sediments and pollutants:	utants:	
Choose the points appropriate for the description that best fits the plants in the wetland. Dense means you	ts in the wotland. Dense means you	
have trouble seeing the soil surface (>75% cover), and uncut means not grazad or mowed and plants are higher	grazed or mowed and plants are higher	
than 6 lh,	(
Dense, uncut, herbaceous plants > 90% of the wetland area	points (6)	
Dense, uncut, herbaccous plants > % of area	points = 3	`
Dense, woody, plants > % of area	points = 2	و
Dense, uncut, herbaceous plants > % of area	points = 1	
Does not meet any of the criteria above for plants	points = 0	
Total for S1	Add the points in the boxes above	4
() () () () () () () () () ()		

Record the rating on the first page \$2.0. Does the landscape have the potential to support the water quality function of the site? Rating of Site Potential If score is: 12 = H ___6-11 = M ___0-5 = L

Record the rating on the first page 0 Yes = 1 No 60 5.2.1. is > 10% of the area within 150 ft on the uphili side of the wetland in land uses that generate pollutarities $\frac{Vor'=1}{Vor'=1}$ No = 0 Yor for the other cources of pollutarities coming into the wetland that are not listed in question 5.2.1?
Other sources Add the points in the boxes above Total for 5 2

S 3.0. Is the water quality improvement provided by the site valuable to society? Rating of Landscape Potential If score is: 1-2 = M 0 = L

Record the rating on the first page S3.1. Does tho wettand discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list? 53.2. It the workand in a basin or sub-basin where water quality is an issue? At least one aquatic resource/orbic bosin is on the 303(d) list. Yes (-1.5) (-1.5)Add the points in the boxes above 53.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? Prewer YES if there is a TMDL for the basin in which unit is found. Total for 53

 \mathcal{C}

Rating of Value If score is 2.4 = H 1 = M 0 = 1

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Wetland name or number

SLOPE WETLANDS Hydrologic Functions - Indicators that the site functions to reduce flooding and stream erosion	G
S.4.0. Does the site have the potential to reduce flooding and stream erosion?	
5.4.1. Characteristics of plants that reduce the velocity of surface flows during storms: Choose the points appropriate for the description that best fits conditions in the wetland. Stems of plants should be thick enough (usually > '/ _t in) or drone mount in service during ending flows.	
Dence, uncut, right plants cover > 90% of the wetland All other conditions All other conditions	O
Rating of Site Potential f. score s,1 = N0 = 1.	s first pag
S.O. Does the landscape have the potential to support the hydrologic functions of the site?	2000
55.1. Is more than 25% of the area within 150 ft updope of wedland in land uses or cover that generate excess surface ranoff?	0
Rating of Landscape Potential If score is:1 = M 0 = L	e first pag
S.6.0. Are the hydrologic functions provided by the site valuable to society?	
S.6.1. Distance to the nearest areas downstream that have flooding problems: The sub-basin immediately down-gradient of site has flooding problems that result in damage to human or	
natural resources (e.g., houses or salmon rodds) Surface flooding problems are his auth-band farther down-gradient popints and points and house flooding problems anywhere downstream	
S6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? Yes = 2 No 60	c
Total for S 6 Add the points in the boxes above	
Contact of the contact of the base of the base of the base of the base of the contact of the base of t	17.4

NOTES and FIELD OBSERVATIONS:

HABITATEUNCT	inese questions apply to wetlands of all HGM classes. HABITAT FUNCTIONS : Indicators that the functions to accompany to the functions and the second	inese questions apply to wetlands of all HGM classes.	of all HGM classes.	
H 1.0, Does the site	H 1.0. Does the site have the potential to provide habitat?	ovide habitat?	e milyonante natural	55 55 55 55
H 1.1. Structure of plans Cowardin plant of 1% ac gr more t	ant community: indicators of t classes in the wetland. Up of the unit if it is of the unit if it is of	re Cowardin classes and state 10 patches may be camb. smaller than 2.5 ac. Add th	H 1.1. Structure of plant community: indicators are Cowardin classes and strata within the Forested class. Check the Cowardin plant classes in the wetaind. Up to 10 partches may be combined for each class to meet the threshold of xea gr more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked. A Statist bed, Assured the Assured Community of the unit if it is smaller than 2.5 ac. Add the number of structures checked.	
Smithship	Emorgant Semberhank (areas where chanks have a 20% records	7806	4 structures or more; points # 4 3 structures; points # 2	
Forested (Forested (areas where trees have > 30% cover)	0% caver)	1 structures; points = 1	(,
If the unii The Fores	if the unit has a Forested class, check if: The Forested class has 3 out of 5 strata (·# taleanopy, sub-canopy, sha	If the unit has a Forested class, check If. The Forested class has 3 out of 5 grats (canoay, sub-canoay, charite, harbaronis, more formed.))
that each	that each cover 20% within the Ferested polygon	ted polygon	figure and the second s	
H 1.2. Hydroperiods Check the type more than 10%	Hydroporiods Oneck the typos of water regimes (hydroporiods) prexent within the wotland. The water r more than 10% of tho wedland or % ac to count (see text for elecatriptions of hydroporiods).	arlods) present within the w count (see text for description	Hydroporiods Gheck the types of water regimes (hydroporiods) present within the wotland. The water regime has to cover more than 10% of its wetland or X as to count (see text for descriptions of hydroporiods).	
Permanen	Permanently flooded or inundated		4 or more types present: points # 3	
Occasiona	Accessionally flooded or inundated		2 types present: points = 2	
Saturated only	Aluo			
Seasonally	Pormonently flowing stream or river in, or adjacent to, the wotland Seasonally flowing stream in, or adjacent to, the wetland	n, or adjacent to, the wotlar ent to, the wetland	P.	
Lake Fring	Lake Fringe wetland		2 points	
Freshwate	Freshwater tidal wetland		2 points	
H 1.3. Richness of plant species	nt species		7.76.6	
Count the num Different patch	Count the number of plant species in the wetiand that cover at least 10 ft." Offerent patches of the same species can be combined to meet the size tha	vetland that cover at least 1 or combined to meet the six	Count the number of plant species in the wetland that cover at least 10 ft? Offerent patches of the same species can be combined to meet the size threshold and use do not have no name	
the species. D	lo not include Eurasian milf	oll, reed canarygrass, purp	Do not include Eurasian miljoli, reed canarygrass, purple loasestrife, Canadian thistie	
it you counted; > 19 species 5 - 19 speci	> 19 species 5 - 19 species		points = 2	
	< 5 species		points = 0	
H 1.4. Intorspersion of habitats Decide from the diagram the diagram have four or mare plant	interspersion of habitats Decide from the dispatants below whether interspersion among Cowardin plants classes (d the classes and unvegetated areas (can include open water or muditats) is high, moderate here four or mare plant classes or three classes and open water, the rething is always high,	nterspersion among Cowar lude open water or muditat isses and open water, the re	Interporsion of habitats The decide from the district below whether interspersion among Cowardin plants classes (described in H.1.1), or the decises and unvegetated areas (can include open water or muditats) is high, moderate, low, or none. If you have four or more plant classes or three decises and open water, the reting is always high.	
				\sim
None = 0 polytic	Low a 1 point	point	Moderate = 2 points)
All three diagrams in this row are HIGH = 3points	4			

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Wetland name or number _____

H 1.5. Special habitat features:

Chock the habit features that are present in the wetland. The number of elecks is the number of points.

Large, downed, woody dobrit within the wetland. The number and 6 it long.

Standing anage (bith > 4 in) within the wetland.

Landecate banks are present for a least 66 if (T in) and/or overhanging plants extends at least 3.3 if (1 in) over a stroam (or disch) in or contiguous with the wetland, for at loast 33 if (10 in).

Stable steep banks of fine material that might be used by beaver or muskrat for danning (> 30 degree where wood is exposed).

Stable steep banks of fine material that might be used by beaver or muskrat for danning (> 30 degree where wood is exposed).

Addoard as of thin-stemmed porsistent plants or woody branches are precent in areas that are permanently or scasconally inundated (structures for egg-loying by emphibilions).

t

Add the points in the boxes above

strata

Total for H 1

× 11101 mm.	Add the points in the boxes above	t
Rating of Site Potential If score is: 15-18 # H 7-14 # M CO-6 # L	Record the rating on the first page	Irst pag
H 2.0. Does the landscape have the potential to support the habitat functions of the site?	ctions of the site?	
H 2.1. Accessible habitate (include only habitate that directly abutes weeland unit). **Calculator: % undisturbed habitat + {(% moderate and low intensity land uses)/2].	ntendthy land uses//2] = 6 % points = 3 points = 3 points = 3 points = 3	
4.10% of 1 km Polygon H 2.2. Undistructed habitat in 1 km Polygon around the wetland. Colleipter. Colleipter. Undistructed habitats > 50% of Polygon Undistructed habitats > 50% of Polygon Undistructed habitat 10-50% and in 1-3 patches Undistructed habitat 10-50% and n 3 patches Undistructed habitat > 10-50% of 1 km Polygon	10	gricoma.
6	Add the points in the boxes above	N
Rating of Landscape Potential if score is: 46 = 1 1.3 = M // 1.2 = 1.4 3.0. Is the habitat provided by the site valuable to society?	Record the rating on the first page	st page
H 3.1. Doce the site provide habitat for species valued in laws, regulations, or policies? Choose only the highest score that oppiles to the wedmed being retext. Size meets ANY of the following criteria: It has 3 or more priority habitats within 100 m (see next page) It provides habitat for Throstened or Endangered species (any plant or animal on the state or federal lists) It is mapped as a location for an individual WDPW priority species It is a Wednard of High Conservation Value as determined by the Opentrament of Natural Resources It has been categorized as an important habitat site in a local or regional comprehensive plan, in a Shoreline Master Plan, or in a waterached plan Stock has 1 or 2 priority habitats (listed on now page) within 100 m	olides? Choose only the highest scare polytics 2 or animal on the state or federal lists) artment of Natural Resources anal comprehensive plan, in a	1 2
5	points = 0	
Nating of Value II scoro Is: = M = M = L Wetland Rating System for Western WA: 2014 Update	Record the rating on the first page 14	rst pog
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WDFW Priority Habitats

Priority, habitats listed by WDFW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia. Washington. 177 pp. http://wdfw.wn.gov/publications/00165/wdfw00165.adf or access the list from here: http://wdfw.wn.gov/conservation/phs/list/).

Count how many of the following priority habitats are within 330 (t (100 m) of the wedand unit. NOTE: This question is independent of the land use between the wedand unit and the priority habitat.

- Aspen Stands: Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- Biodiversity Areas and Corridors: Areas of habitat that are relatively important to various species of native fish and
 wildlie (full descriptions in WDFW PHS report).
- Herbaccous Balds: Variable size patches of grass and forbs on shallow soils over bedrock.
- old-growth/Mature forests: <u>Old-growth west of Cascade creet</u> Stands of at least 2 tree species, forming a multilayered canopy with occasional small openings; with at least 8 trees/ac [20 trees/ha] > 52 in (81 cm) dish or > 200 years of ago, <u>Mature Locasis</u> - Stands with average diameters exceeding 21 in (53 cm) dish; crown cover may be less than 100%, decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade creet.
- Oregon White Oak: Woodhind stands of pure oak or eak/conflor associations where canopy coverage of the eak /component is important (full descriptions in WDFW PHS report p, 158 see web link above).
 - Figurian: The area adjacent to aquate systems with flowing water that contains elements of both aquate and servestral ecosystems which mutually influence each other.
- Westside Prairies: Herbaccous, non-forested plant communities that can either take the form of a dry prairie or a wet
 fraine (full descriptions in WDFW PHS report p. 161 see web link above).
- Instream: The combination of physical, biological, and chemical processes and conditions that interact to provide
 functional life history requirements for instream fish and wildlife resources.
- Mearshore: Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and
 Puget Sound Nearshore, (full descriptions of habitats and the definition of relatively undisturbed are in WDFW report
 see web link on previous page).
 - Caves: A naturally occurring cavity, rocoss, void, or system of interconnected passages under the earth in solls, rock,
 ice, or other geological formations and is large enough to contain a human.
- Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.
- Totas: Homogenous areas of rock rubble ranging in average size 0.5 6.5 ft (0.15 2.0 m), composed of basalt, andesize, And/or sedimentary rock, including riprap sildes and mine tailings. May be associated with cliffs.
- Shage and logs: Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to each cavity exercation; use by wildlife, Priority snags have a diameter at breast height of > 50 in (51 cm) in western Washington and are > 65 ft (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed

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Wetland name or number

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Cheek of any criteria that apply to the wetland. Crele the category when the appropriate criteria are met.	Lategory
The vergenties, and with a solinity greater than 0.5 ppt Yes −Go to SC 1.1 / No=Not an estuaring weddand	
fe Refuge, National Park, National Est Mronmental, or Scientific Reserve dos Yes =	G. I.
\$ 5 cd 6	- ii
mowed grassland. The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. $\forall cs = Category\ 1$	ert.=
SC 2.0. Wetslands of High Conservation Value (WHCV) SC 2.1. Has the W. Department of Natural Resources updated their website to include the list of Wellands of High Conservation Value? SC 2.2. Is the wetsland listed on the WDNR database as a Wetsland of High Conservation Value? SC 2.2. Is the wetsland listed on the WDNR database as a Wetsland of High Conservation Value? MET CONSERVATION TO BE A CONSERVATION TO BE A CONSERVATION TO BE A CONSERVATION TO BE NOT A WHCV SC 2.3. Is the wetsland in a Section/Township/Range that contains a Natural Heritage wetsland? Westland A CONSERVATION TO BE NOT A WHICH A CONSERVATION TO BE NOT A WHCV Yes — CONSERVATION TO BE NOT A WHICH TO BE NOT A CONSERVATION TO BE NOT A WHICH TO BE NOT A CONSERVATION TO BE NOT A WHICH TO BE NOT A WHICH TO BE NOT A CONSERVATION TO BE NOT A WHICH TO BE NOT	03 t- 1
SC 3.0. Bogs The word and (or any part of the unit) meet both the criteria for soils and vegetation in bogs? Use the key Does the word and (or any part of the unit) meet to rete the wetland based on his functions. Becau. Does an area within the wetland unit have organic soil horizons, either posts or mucks, that compose 16 in or more of the first 32 in of the soil profile? SC 3.1. Does an area within the wetland unit have organic soils, either posts or mucks, that are less than 16 in deep over bedroek, or an impremobalo hardpan such as day or volcanic ash, or that are floating on top of a lake or pond? SC 3.3. Does an area with posts or mucks have more than 70% cover of mosts at ground level, AND at loast a 30% SC 3.3. Does or an area with posts or mucks have more than 70% cover of mosts at ground level, AND at loast a 30% Nower of plant species listed in Table 4? NOTE: if you are uncertain about the extent of mosts in the understory, you may substitute that criterion by	
measuring the Hot of the water that seeps into a hote dug at least 15 in deop. If the PH is less than 5.0 and the part species in Table 4 are present, the wentand is a bog, part species in Table 4 are present, the wentand is a bog. SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fif, wentern red cedar, western hemleds, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AMD any of the species (or combination of species) listed in Table 4 provide more than 30% of the cover under the canopy? yes # Is a Category 1 bog. No Paper a bog to a	Cat.

SC 4.0. Forested Wetlands

This page left blank intentionally

Wetland name or number___

Cor. ずず ទី 5 <u>=</u> Qt.⊞ <u>خ</u> ខ័ Old-growth forests (wast of Cascade creat); Stands of at loast two tree species, forming a multi-layered canopy with occasional small openings; with at lease 8 trees/ac (20 trees/ha) that are at least 200 years of age OR have a diameter at breast height (dbh) of 32 in (81 cm) or more.

— Maturo forests (west of the Cascade Creat); Stands where the largest trees are 80-200 years old OR the species that make up the canopy have an average diameter (dbh) exceeding 21 in (53 cm). Yes = Category ! (No) Not a forested wetland for this section during most of the year in at least a portion of the lagoon *(needs sode moesured near the bottom)*SC 5.1. Does the wetland meet all of the following three conditions? SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a mosale of wedands that is between 0.1 and 1 ac? $\label{eq:control} \forall cs=\text{Category II} \quad \text{No}=\text{Category IV}$ No = Category II SC 6.1. It the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates HJH) or HJH, M for the three aspects of function)?

SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger?

Yes = Category II No - Go to SC 6.3. Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUD)? If you answer you will still need to rate the wetland based on its habitat functions.

— In practical terms that means the following geographic areas:

— Long Beach Penihalia. Lands west of SR 103

— Grayland-Westport: Lands west of SR 103 Occoun Shores-Copalis: Lands west of SR 115 and SR 109
Yes – Go to SC 6.1 /No = you an interdunal wetland for rating Does the wetland have at loast 1 continues age of forest that meets one of these arteria for the WA Department of Fish and Wildlife's forests as priority habitate? If you enswer YES you will still need to rate the wetland based on its functions. Doos the wortland meet all of the following criteria of a wetland in a coastal lagoon?

— The wortland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks

— The lagoon in which the wetland is located contains pended water that is saline or brackets (> 0.5 ppt) — The wedand is relatively undisturbed that no diking, ditching, filling, cultivation, grazing), and has less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100).

—At least X of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-Yes = Category | Catogory of wetland based on Special Characteristics if you answered No for all types, enter "Not Applicable" on Summary Form — The wetland is larger than $^1/_{10}$ ac (4350 ft^3) SC 5.0. Wetlands in Coastal Lagoons SC 6.0. Interdunal Wetlands

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RATING SUMMARY – Western Washington

Maps and figures required to answer questions correctly for

Western Washington

Depressional Wetlands

Wetland name or number_

27 - 1 Date of site visit: 5 4 22	d by Ecology?	Wetland has multiple HGM classes?YN
. washi	すると	200
Name of wetland (or ID#):	Rated by E.M. ILS. L.	HGM Class used for rating

NOTE: Form is not complete without the figures requested (figures can be combined).

Source of base aerial photo/map

OVERALL WETLAND CATEGORY (based on functions or special characteristics)

H21, H22, H23

Hydroperiods

Location of outlet (can be added to map of hydroperiods)

Boundary of area within 150 ff of the wetland (can be added to another figure)

Map of the contributing basin

I kim Polygon: Area that extends 1 km from enter wetland edgo - including

polygons for accessible habitat and undisturbed habitat

Sereen capture of map of 8316; listed waters in basin (from Ecology website)

Sereen capture of fist of TMDLs for WRIA in which unit is found (from web)

Category of wetland based on FUNCTIONS

_Category III - Total score = 16 - 19 ∠Category II – Total score = 20 - 22 _Category IV - Total score = 9 - 15 _Category I - Total score = 23 - 27

FUNCTION	_ ¥ ¥	9.9	Improving ater Quality	İ	ydrol	Hydrologic	(891)	Habita	at	
	{				5,	Trole the appropriate ratings	o d	riote r	rthas	
Site Potential	\exists	Σ	4	Ξ	Σ	_	포	Σ	3	
Landscape Potential	×	Σ	b	I	Σ	Q	x	Σ	\bigcirc	
Value	Ξ)	Σ	د	I	٤	1	Ξ	Σ	-	2
Score Based on Ratings	_	+			M			W		-

2. Category based on SPECIAL CHARACTERISTICS of wetland

Ectuarine I II Wethand of High Conservation Value I Bog I Mature Forest I Old Growth Forest I Coastal Lagoon I Interdunal I None of the above I	CHARACTERISTIC	CATEGORY
onservation Value	Estuarine	11 11
	Wetland of High Conservation Value	I
	308	1
	Mature Forest	I
	Old Growth Forest	ı
	Coastal Lagoon	П 1
None of the above	Interdunal	и шп
	None of the above	7

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Score for each function based on three rathings (order of ratings is not important)

Map of: Cowardin plant classes Riverine Wetlands

> 78H,H,L 78H,M,M 68H,M,L 68M,M,M 58H,L,L 58M,M,L 38H,L,L 38H,L,L 38H,L,L 9 H,H,H = 8

> > 国土

R4.1 R2.2, R2.3, R5.2 H2.1, H2.2, H2.3

Width of unit vis. width of stream (can be added to another jiqure)
Map of the contributing basin

I km Polygon: Area that extends I km from antire wetland edge - including

polygons for accessible habitat and undisturbed habitat

Hydroperiods
Ponded depressions
Boundary of area within 150 ft of the weetand (cen be odded to enother figure).

Screen capture of map of 303(d) listed waters in basin (from Ecology website) R 3.1 Screen capture of list of TMDLs for WRIA in which unit is found (from web) R 3.2, R 3.3

Lake Fringe Wetlands

Map of:	To answer questions: Figure #	Figure #
Cowardin plant classes	L1.1, L4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaccous plants	11.2	
Boundary of area within 150 ft of the wotland (can be added to another figure)	122	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2,2, H 2,3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	13.1,13.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L3.3	
Slope Westands		
Map of	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperlads	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	\$1,3	
Plant cover of dense, rigid trees, shrubs, and herbaccous plants	54.1	
(can be added to figure above)		
Boundary of 150 ft buffer (can be added to another figure)	521,55,1	
1 km Polygon: Area that extends 1 km from onthro wetland edge - including	H 2,1, H 2,2, H 2,3	
polygons for accessible habitet and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	53.1, 53.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	533	

HGM Classification of Wetlands in Western Washington

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in For questions 1-7, the criteria described must apply to the entire unit being rated questions 1-7 apply, and go to Question 8.

Are the water levels in the entire unit usually controlled by tides except during floods?

NO)-go to 2

YES - the wetland class is Tidal Fringe - go to 1.1

1.1 Is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

NO - Saltwater Tidal Fringe (Estuarine)

If your wetland can be classified as a Freshwater Tidal Fringe use the forms for Riverine wetlands. If it is Salewater Tidal Fringe it is an **Estuarine** wetland and is not scored. This method **cannot** be used to YES - Freshwater Tidal Fringe score functions for estuarine wetlands. The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit.

Tf your wetland can be classified as a Flats wetland, use the form for **Depressional** wetlands NO-50 to 3

YES - The wetland class is Flats

Does the entire wetland unit meet all of the following criteria?

___The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac. (8 ha) in size; At least 30% of the open water area is deeper than 6.6 ft (2 m).

YES - The wetland class is Lake Fringe (Lacustrine Fringe) NQ-g0 to 4

Does the entire wetland unit meet all of the following criteria?

_The wetland is on a slope (slope can be very graduaf),
_The water flows through the wetland in one direction (unidirectional) and usually comes from

seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks, The water leaves the wetland without being impounded.

NO / go to 5

YES - The wetland class is Slope

shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft NOTE: Surface water does not pond in these type of wetlands except occasionally in very small and deep),

Does the entire wetland unit meet all of the following criteria?

The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,

The overbank flooding occurs at least once every 2 years.

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Wetland name or number

-NOTE: The Riverine unit can contain depressions that are filled with water when the river is not YES - The wetland class is Riverine NO)- go to 6 flooding

surface, at some time during the year? This means that any outlet, if present, is higher than the interior Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the of the wetland. છ

NO - go to 7

YES - The wetland class is Depressional

maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural Is the entire wetland unit located in a very flat area with no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be outlet .

NO - go to 8

YES - The wetland class is Depressional

stream within a Depressional wedand has a zone of flooding along its sides, GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1.7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the wedland unit being scored. classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small Your wetland unit seems to be difficult to classify and probably contains several different HGM ω**.**

is less than 10% of the unit; classify the wecland using the class that represents more than 90% of the NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 total area,

HGM classes within the wetland unit being rated	HGM class to use in rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake Fringe	Lake Fringe
Depressional + Riverine along stream	Depressional
within boundary of depression	
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other	Treat as
class of freshwater wetland	ESTUARINE

I you are still unable to determine which of the above criteria apply to your wetland, or if you have more than 2 HGM classes within a wetland boundary, classify the wetland as Depressional for the

7 3 T Record the rating on the first page points # 2 D.1.0. Does the site have the powerbut or meeting. D.1.1. Characteristics of surface water outflows from the webang: Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water laaving it (no outlet). Add the points in the boxes above points = 2 Water Quality Functions - Indicators that the site functions to improve water quality. Wetland has an intermittontly flowing stream or ditch, OR highly constricted permanently flowing outlet. DEPRESSIONAL AND FLATS WETLANDS D 14. Characteristics of seasonal bonding or inundation: This is the area that is panded for at loast 2 months. See description in manual. Rating of Site Potential If score is: V 12-16 # H 6-11 # M 0-5 # L D 1.0. Does the site have the potential to improve water quality? Area seasonally ponded is > % total area of wetland Area seasonally ponded is > % total area of wotland Area seasonally ponded is < % total area of wotland Total for D 1

D.2.0. Done the landscape have the present of the support the support		
Janes and in lightly in water dealers of the state of the	(100 (A) (A) (A)
D 2.1. Does the wetland unit receive stormwater discharges?	No.	0
0 2.2. is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? Yes = 1 No 40.	No. Se	5
D 2.3. Are there septic systems within 250 ft of the westland?	No a/6	70
D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1-D 2.3?	, E	c
Source Yes = 1 No # 0	Se EG)
Total for D.2 Addatfe points in the boxes above	above	0
Rating of Landscape Potential If score is: 3 or 4 = H 1 or 2 = M 10 mL Record the rating on the first page	g on the first	poge

22322	િ	-	4	ભ	
SALES AND MARKET HERE	water that is on the	Yes (T) No = 0	ter quality (answer YES	Add the points in the boxes above	Record the rating on the first near
D 3.0. is the water quality improvement provided by the site valuable to society?	D 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list?	D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) lix?	0.3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality (grawer YEs If there is a TMDL for the basin in which the unit is found?) If there is a TMDL for the basin in which the unit is found? Yes $a(2)$ No $a(3)$	Add the poin	Record the re
oy the site v	mi) to a stre	quatic resour	ol plan as imp found)?		0=1
ent provided !	ly (i.e., within 1	sin where an ac	atershed or loca which the unit is		H Jak
quality improvem	land discharge direct	i in a basin or sub-ba	Has the site been identified in a watershed or local plan as if there is a TMDL for the basin in which the unit is found??	1	f score Is: 1 2.4 =
D 3.0. is the water	D 3,1. Doos the wet 303(d) list?	D 3.2. Is the wetland	D 3.3. Has the site b	Total for D 3	Rating of Value If score Is: Z-4=H 1= M 0=L

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Wetland name or number

D 4.0. Does the site have the potential to reduce flooding and erosion?	
D41. Characteristics of surface water outflows from the wetland: Wetland is a depression or flat depression with no surface water looking it (no outlet) Wetland is a depression or flat depression with no surface water looking it (no outlet) Wetland has an internitivantly flowing stroam or direh. OR highly wonstricted permanently flowing outlet points = 1 Wetland is a flat depression (QUESTION or Newly, whose outlet is a permanently flowing direh points = 1 Wetland has an inconstricted, or alleight constricted, surface outlet that incomments outlet outlet in the surface outlet that incomments outlet outlet in the surface outlet that incomments outlet outlet in the surface outlet in the surfa	Cc
Capth of accases during west periods; Estimate the height of ponding above the bestom of the outlet. A with no outlet, measure from the surface of permonent water or if dry, the despect part. Maris of ponding are at for more above the surface or bottom of outlet Nords of ponding seveen? It to a 3 if from surface or bottom of outlet Do Marks are at load 0.5 if to < 2 if from surface or bottom of outlet Do Marks are at load 0.5 if to < 2 if from surface or bottom of outlet The wetland is a "noadwares" wetland Marks of ponding less than 0.5 if (6 in) pon Marks of ponding less than 0.5 if (6 in)	0
0.4.3. Contribution of the workland to storage in the watershoet; Estimate the ratio of the area of upstream basin contribution outsets weekers to the weekers to the weekers to the weekers to the unit. The area of the basin is less than 10 thins the area of the unit. The area of the basin is 10 to 100 thins the area of the unit. The area of the basin is more than 100 thins the area of the unit. Entre area of the basin is more than 100 thins the area of the unit. Entre area of the basin is more than 100 thins the area of the unit. Entre area of the basin is more than 100 thins the area of the unit.	V
Radiog of Site Potential If score is: 12-16 = H V 6-11 = M 0-5 = L Record the rating on the first page	
D 5.2.15 > 10% of the area within 150 ft of the wetland in land uses that generate excess runoff? Yes = 1. No e ² () D 5.3.15 more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/Ac, urban, commercial), articulture, etc. (7)	
2= M 1_0=L Add the points in t	re flest pa
D 6.0. Are the hydrologic functions provided by the site valuable to society? D 6.1. The unit is in a landscaper that has flooding grapherns. Choose the description that best matches conditions around the welfund unit being rated. Do not add points. Choose the highest score if make than one condition is met.	
In water a control of the with floor of the water of the	
D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? Yos = 2 No(=0)	5
Total for D 6	

quality		Ţ.	points = 8	points # 4	points ≈ 2	points ≠ 0		points = 8	points = 6	points='6	points = 3	points = 0		Record the rating on the first page		No # O	No se 0	arcut No = 0
ons to improve water c		ents during a flooding even	lod	lod	pod	lod	not Cowardin classes)	8	lod.	Jod	oc.	lod		Record the I	function of the site?	Yosaz Nomo	real Yes=1 No=0	forests that have been clearcut Yes = 1 No = 0
Water Quality Functions - Indicators that the site functions to improve water quality	R 1.0. Does the site have the potential to improve water quality?	R.1.1. Area of surface depressions within the Riverine wetland that can trap sediments during a flooding event:	Depressions cover > 3/4 area of wotland	Depressions cover > ½ area of wetland	Depressions present but cover < ½ area of wetland	present	R.1.2. Structure of plants in the wetland (areas with >90% cover at parson height, not Cowardin classes)	Trees or shrubs > // area of the wetland	Trees or shrubs $> 1/3$ area of the wetland	Herbaceous plants (> 6 in high) > 2 / ₃ area of the wetland	Horbaccous plants (> 6 in high) > $\frac{1}{3}$, area of the wetland	Trees, shrubs, and ungrazed herbaccous $< \frac{1}{2}$, area of the wetland	Add the points in the boxes above	Rating of Site Potential If score is: 12-16 = H6-11 = M0-5 = L	R.2.0. Does the landscape have the potential to support the water quality function of the site?	R 2.1. is the wetland within an incorporated dty or within its UGA?	R.2.2. Does the contributing basin to the wetland include a UGA or incopporated area?	R.2.3. Does at least 10% of the contributing basin contain tilled fliglds, pastures, or forests that have been clearcut within the last 5 wors?
Water	R 1.0, Does the site	R 1.1. Area of surface	Depressions cov	Depressions cov	Depressions pre	No depressions present	R 1, 2, Structure of plan	Trees or shrubs	Trees or shrubs	Herbaceous pla	Herbaccous pla	Trees, shrubs, a	Total for R 1	Rating of Site Potenti	R 2.0. Does the land	R 2.1. Is the wetland v	R 2.2. Does the contri	R 2.3, Does at least 10% of the

: first page	Record the rating on the first page	0 = 0	1 or 2 m M	HE9E	the If score is	Rating of landscape Potential If score is 3-6 a H 10r 2 a M 0 a L
	Add the points in the boxes above	Add the poin		/		Total for R.2
	Yes=1 No=0			\		Other sources
	tions R 2.1-R 2,4	at are not listed in quesi	the wetland th	ts coming lpt(as of pollutar	R 2.5. Are there other sources of pollutants coming lyto the wotland that are not listed in questions R 2.1-R 2.4
	Yes 1 No = 0	t generate pollutants?	In Jahd uses tha	the wetland	/thin 150 ft o	R 2.4. Is > 10% of the area within 150 ft of the wetland in Jahd usos that generate pollutants?
	Yes=1 No=0				55	within the last 5 years?
	have been clearcut	sastures, or forests that l	in tilled flejds, p	of basin contr	he contributi	R 2.3, Does at least 10% of the contributing basin contain tilled figlds, pastures, or forests that have been clearcut
	Yes#1 Now0	prograted area?	de a UGA or Inco	wetland inclu	basin to the	R 2.2. Does the contributing basin to the wetland include a UGA or incorporated area?
	Yose 2 No # 0		in its UGA?	ed city or with	an Incorporat	R 2.1. is the wetland within an incorporated day or within its UGA?
	ine state	מושווה לשושוו מו	and and and	returial to an	נוסאב מום אני	A 2.0. Does the language have the potential to appoint the water during January of the state

R 3.0. is the water quality improvement provided by the site valuable to society?
R.3.1. Is the wetland along a syream or river that Is on the 303(d) list or on a tributary that drains to one within 1 mi?
Yes=1 No=0
R.3.2. Is the wetland/slong a stream or river that has TMDL limits for nutrients, toxics, or pathogens?
Yosel Noed
R 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? (answer
YESM there is a TMDL for the drainage in which the unit is found)
Total for R3
Design of Value & France is 2.4 = 14 1 = 30 0 m Record the ratios on the first book

Hydrologic Functions — Indicators that site functions to reduce flooding and stream erosion R 4.0. Does the site have the potential to reduce flooding and erosion?

RIVERINE AND FRESHWATER TIDAL FRINGE WETLANDS

Wetland name or number

Add the points in the boxes above points = 7 points = 4 points # 0 points = 6 points = 4 points = 2 R.1.1. Characteristics of the overbank storage the welland provides:

Estimate the average width of the wedand perpendicular to the direction of the flow and the width of the stream or river channel (distance between banks). Calculate the radio: (average width of wedand)/(average width of stream between banks),

If the cash is more than 20

If the cash is more than 20

If the ratio is 10-20 R4.2. Characteristics of plants that slow down water velocities during floads: Treat large wooglyfebris os farest or shrub. Choose the points appropriate for the best description (polygons need to have 590% cover at person height. These are NOT <u>Cowardin</u> desses). Forest or shrub for $>^2/_3$ area OR emergent plants $>^2/_3$ area Forest or shrub for $>^1/_3$ area OR emergent plants $>^1/_3$ area Plants do not meet above criteria If the ratio is 5-<10 If the ratio is 1-<5

Record the rating on the first page R 5.0. Does the landscape have the potential to support the hydrologic functions of the site? Rating of Site Potential If score is: 12-16 = H 6-13 = M 0-5 = L

Record the rating on the first page Yes#1 No #0 Yes m O No * 1 Add the points in the boxes above Yes#0 Nom1 Rating of Landscape Potential if score is: 3 = H __ 1 or 2 = M __ 0 = L R 5.2. Does the up-gradient watershed include a UGA or incorporated area? R 5.1. is the stream or river adjacent to the wetland downcut? R 5.3. Is the up-gradient stream or river controlled by dams? Total for R.S.

R 6.0. Are the hydrologic functions provided by the site valuable to society?

Choose the description that best fits the site.

The sub-basin immediately down-gradient of the weekand has flooding problems that result in damage to

The sub-basin immediately down-gradient of the weekand has flooding problems that result in points # 2

points # 2 R 6人と Distance to the nearest areas downstream that have flooding problems?

R 6.2. Has the site been Identified as important for flood storage or flood conveyance in a regional flood control plan? points = 0 Yes # 2 No # 0 human or natural resources (e.g., houses or salmon redds) Surface flooding problems are in a sub-basin farther down-gradient No flooding problems anywhere downstream

Record the rating on the first page Add the points in the boxes above Total for R 6

Rating of Value If score Is: 2-4 m H 1 = M 0 = L

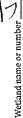
Wetland Rating Systom for Western WA: 2014 Update Rating Form – Effective January 1, 2015

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HABITAT FUNCTIO	HABITAT FUNCTIONS - Indicators that site functions to provide important habitat	rese questions apply to wetlands or all HGM classes. cators that site functions to provide important harbors	of all HGM classes.	
H 1.0. Does the site	H 1.0. Does the site have the potential to provide habitat?	wide habitat?		
H.1. Structure of plan Cowardin plant c of % oc more u Aquatic bed Forested (ar if the unit h The Forested The Forested The Forested The Forested	tutre of plant community; indicators are Cowardin al ardin plant classes in the wetland. Up to 10 pottbes, or more than 10% of the unit if it is smaller than 2 Aquatic bad Ambaric bad Semb-harub (areas where shrubs have > 30% cover) Forested (areas where shrubs have > 30% cover) if the unit has a forested class, check if; The Forested class has 3 out of 5 strata (canopy, sub- that each cover 20% within the Forested polygon.	re Cowardin dosses and sa to 10 patches may be comb smaller than 2.5 ac. Add th >> 30% cover) M. cover) If: a (sanopy, sub-canopy, shr e (apolylyon	H 1.1. Structure of plant community, indicators are Cowardin classes and strato within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold of 3 or more than 10% of the unit lift is smaller than 2.5 ac. Add the number of structures check the Aquate back on more points = 4 Anual before an order than 1.5 ac. Add the number of structures or more points = 4 Anual before an order than 1.5 ac. Add the number of structures or more points = 4 Structures or more points = 2 Structures points = 2 Structures points = 2 Structures points = 1 Structures = 1 Structures = 1 Structures = 1 Structures = 1 Structures = 1 Structures = 1 Structures = 1 Structures = 1 Structures = 1 Structures = 1 Structures = 1 Structures = 1 Structu	0
H.1.2. Hydroperiods Chock the typos of water more than 10% of the wer permanently floodes Permanently flooded Occasionally flooded Saturated only Permanently flowling Saturated only Permanently flowling Saturated only Fermanently flowling Lake Fringe weeland Lake Fringe weeland Freshwater tidal weel	Check the types of water regimes (hydroperlods) present within the wetland. The water remore than 10% of the wetland or % ac to count (see text for descriptions of hydroperlods). Formanoutly flooded or inundated Seasonally flooded or inundated Seasonally flooded or inundated Seasonally flooded or inundated Seasonally flooded or inundated Sammared only Formanently flowing stroam or river in, or adjacent to, the wetland Libbe Fings wetland Libbe Fings wetland Freshwater tidal wetland	ount (see text for description to would see text for description and adjacent to, the wetland and to, the wetland	Object the types of water regimes (hydropenlods) present within the wetland. The water regime has to cover more than 15% of the wetland or % ac to count (see text for descriptions of hydropenlods). 4 or more types present points = 3 5 exaconally flooded or inundated Cocasionally flooded or inundated Cocasionally flooded or inundated Saturaced only Permanently flowing stroam or river in, or adjacent to, the wetland Lippe present points = 0 Enable Fings wetland Lake Fings wetland 2 points	
H.J.s. Nichnosos or plant speedes Outurt the number of plants som Different partches of the som the speedes. Do not heliuful If you counted! > 13 speedes 6 - 19 speedes.	isofanosa to plant species in the weeland that cover at least 10 ft.? Court the number of plant species in the weeland that cover at least 10 ft.? Oliflerent portohes of the same species can be combined to neet the size bin the species. Do not include Eurasian miljoil, reed canorygrass, purple loo if you counted: > 13 species 3 - 19 species 4 - 5 species.	etland that cover at least 1 e combined to meet the siz il, reed conorygrass, purpl	Countess or plant species. Counties or plant species in the wetland that cover at least 10 ft². Different partches of the same species can be combined to meet the size threshold and you do not thave to name the species. Bo not heliate Euresian miljoil, reed canarygrass, purple bossertife, Canadian thistie points = 2 ~ 19 species. 5 - 19 species. 5 - 19 species. 6 - 19 species.	
N. 1.1. interperson on habitats. Dodde from the diagram the diagram the diagram the diagram the diagram here-four or more plant to diagrams. Nonge 0 paints All three diagrams in this row are Hight a 3points.	intersponder on habitats Dodde from the diagrams the dosses and unvegerated areas (an include open water or muditals) is high, moderate the dosses and unvegerated areas (an include open water, the rating is always high, therefour or more plant classes or three classes and open water, the rating is always high, and 0 plants tow = 1 point Tow = 1 point Moderat Moderat Moderat Miderat Moderat Miderat Miderat Moderat Miderat Mi	tersporsion among Cowars de opon water or muditat see and opon water, the ro point	Interoperation of habitats Obtodie from the digrams below whether intersparsion among Cowardin plants diaseas (described in H.1.1), or the classes and unwegerated areas (can include open water or mudibal) is high, moderate, low, or none. If you have four or more plant classes or three classes and open water, the rating is always high. Interpretation of the plants of the classes and open water, the rating is always high. Interpretation of the classes of three classes and open water, the rating is always high. Interpretation of the classes of three classes and open water, the rating is always high. Interpretation of the classes and open water, the rating is always high. Interpretation of the classes and open water, the rating is always high. Interpretation of the classes and open water, the rating is always high. Interpretation of the classes and open water, the rating is always high. Interpretation of the classes and open water, the rating is always high.	\circ

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H 1.5, Special habitat features:	
Chock-the habitat features that are present in the wetland. The number of checks is the number of points. Large, downed, woody debris within the wetland (> 4 in diameter and 6 it lang).	
— Standing spage (4bh > 4 h) within the wetland — Moderat bases are present for at thosis 6 kf (2 m) and/or overhanging plants extends at least 3.3 ft (2 m) over 3 stroam for distall, no rondinense with the workload for at least 3.0 ft (2 m).	
Stable steep banks of fine material, that might be used by beaver or musk for dening (> 30 degree slope) OR signs of recent beaver activity and proposed to the signs of recent beaver activity and proposed to the signs of recent beaver activity and proposed to the signs of recent beaver activity and proposed to the signs of recent beaver activity and proposed to the signs of recent beaver activity and proposed to the signs of recent beaver activities.	~
where wood is exposed))
The reases when the second properties of the second properties are present in areas that are permanently or seasonally interested (seturbies for eggi-leging by amphibilisms) I mystyro plants conceived than 35% of the current of the conceived to the conceived t	
strate)	
Total for H 1 Add the points in the boxes above	V
Rating of Site Potential If score is: 15-18 = H 7-14 = M 1 G-6 = 1 Record the rating on the first page	the first pa
dons of the site?	
habitat (include only habitet that directly abuts wetland unit).	
Colculate: % undisturbed habitat $+$ 1(% moderate and low intensity land uses)/2) = $\frac{1}{2}$ %	
)	
20-33% of 1 km Polygon	•
ed habitat in 1 km Polygon around the wotland.	
% moderate and low intensity land uses)/2]	
atter C	
Undisturbed habitat 10-50% and > 3 patches	مسد
uožķi	
Gr.	
> 50% of 1 km Polygon is high intensity land uso	7
Solution 1 Anti-rupgen is night intensity Total for H.2	
Rating of Landscape Potential If score is: 4-6 = H 1-3 = M < 1 = 1.	C first page
H.3.1. Does the site provide habitat for species valued in laws, regulations, or politice? Choose only the blokes resear	
that opplies to the wetland being rated.	
The meets Any of the following criteria:	
— It browldes habitat for Throatoned or Endanged and a feet and a	ſ
It is mapped as a location for an individual WDRW priority spacies. It is always a location for an individual WDRW priority spacies. It is a Wedand at light Concoming Main an advantage of the space)
thas been categorized as an important habitat site in a local or regional comprehensive plan, in a	
shoreine wasser Plats, or in a watershed plan Site has 1 or 2 priority habitats (listed on next page) within 100 m	
nyof the crite	
O#1 Record	he first pag
Wetland Rating System for Western WA: 2014 Updato	



WDFW Priority Habitats

Priority habitats listed by WDFW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fels and Wildlife, 2008, Priority Habitat and Species List. Olympia, Washington. 177 pp. http://wdfw.wa.coc/publications/00165/wdfw00165.pdf or access the list from here: http://wdfw.wa.gov/conservation/phs/list/)

Count how many of the following priority habitates are within 330 (t (100 m) of the wedand unit. NOTE: This question is independent of the land use between the wedand unit and the priority habitat.

- Aspen Stands: Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- Blodiversity Areas and Corridors: Areas of habitat that are relatively important to various species of native fish and
 whelite (full descriptions in WDFW PHS report).
- --- Herbaccous Balds: Variable size patches of grass and forbs on shallow soils over bedrock.
- Old-growth/Mature forests: Old-growth west of Gasande crest Stands of at least 2 tree species, forming a multilayered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) > 23 in (81 cm) dbh or > 200
 years of ago, Mature Gross. Stands with survenge diameters exceeding 2.1 in (53 cm) dbh; crown covor may be less
 than 100%, decay, decadence, numbers of stags, and quantity of large downed material is generally less than that
 found in old-growth; 80-200 years old west of the Cascade crest.
- pregon White Oak: Woodland stands of pure oak or oak/confer associations where canopy coverage of the oak component is important (fill descriptions in WDFW PHS report p. 158 see web link above).
- Riparlan: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrostrial ocosystems which mutually influence each other.
- Westside Prairies: Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet
 prairie (fuil descriptions in WDFW PHS report p. 161 see web link above).
- Instream: The combination of physical, biological, and chomical processes and conditions that interact to provide functional ille history requirements for instream fish and wildlife resources.
- Nearshore: Relatively undistarbed nearshore habitats. These include Coastal Noarshore, Open Coast Nearshore, and
 Puget Sound Nearshore. (full descriptions of hobitats and the definition of relatively undistarbed are in WDFW report
 see web link on previous page).
- Caves: A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock.
 lee, or other geological formations and is large enough to contain a human.
- CIIIIs; Greator than 25 ft (7.6 m) high and occurring below 5000 ft elevation.
- Talus: Homogenous areas of rock rubble ranging in average size 0.5 · 6.5 ft (0.15 · 2.0 m), composed of basalt, andesite, And/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.
 - Shags and Logs: Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation (use by wildlin, Priority snags have a diameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 it (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed

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Wetland name or number ____

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Does the westland wether the following criteria for Extuarine wetlands? — The deminant water regime is tidd, — We deminant water regime is tidd, — We deminant water regime is tidd, — We deminant water regime is tidd, — We deminant water the topowing criteria is a second to the following the following three conditions? — With a salinity greater than 0.5 ppt Preserve, State Park or Educational, Environmental, or Scientific Recerve designated under WCC 32-20-5121 Preserve, State Park or Educational, Environmental, or Scientific Recerve designated under WCC 32-20-5121 — The wetland within a National Wildliff Refuge, hadronal Park, National Externe Configuration of the State Park or Educational, Environmental, or Scientific Recerve designation on the World- — The wetland unit at least 1 as in size and meets at least two of the following three conditions? — The wetland is relatively undisturbed (has no diffing, ditching, filling, cultivation, grazing, and has lees than 100 section than 100 section 100 sect	Wetland Type Check off any cited a phisaphy to the wetland. Cities the caregosy when the appropriate citeds are met.	Category
25.23 25.23 26.23 MHCV MHCV MHCO MHC	e wetland	
d has less \$\frac{9}{9}\$ azed or un- n water, or n water, or = Category II nds of High Go to SC 2.3 Not a WHCV Not a WHCV Ilized it on Not a WHCV Ilized it on Set a fee key grift use the key an 16 in deep e to do 5 a 186c or fo fo 186c or fo fo 186c or fo fo 186c or fo fo 186c or fo fo 186c or fo fo 186c or fo fo 186c or fo fo 186c or fo fo 186c or fo fo 186c or fo fo 186c or fo fo 186c or fo fo 186c or fo for 186c or fo for 186c or fo for 186c or fo for 186c or fo for 186c or fo for 186c or for	SC1.1. Is the wetland within a National Wildlife Refuge, National Park, National Externy, Natural Area Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151? Yes w Category! No -Go to SC1.2.	Cat.
d their website to include the list of Mighands of High Visa = Category II d their website to include the list of Mighands of High Visa = Category II ains a Natural Hertago wetland? The westland better their of Mighands of High Visa = Category II NONINP/WONK and go to SC 2.2 **WINP/WONK and go to SC 2.4 **WINP/WONK and go to SC 2.4 **WINP/WONK and go to SC 2.4 **Winp/WONK and go to SC 2.4 **Work and of High Conservation (Aujorial Listed Hon Yor = Category I **In or enterial for solls and vegetation in bogs? Use the key the weetland based on its function. Ill horizons, either poats or mucks, that onnoce 16 in or Ves = 6 or SC 3.2 **Secover of mosses at ground level, AND at losst a 30% **Yes = Go to SC 3.3 **No = Go to SC 3.3 **Yes = Go to SC 3.3	SC1.2. Is the wothand unit at least 1 ac in size and meets at least two of the following three conditions? — The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less than 10% cover of non-mative plant species. (I non-mative species are <i>Sportion</i> , see page 25 or the landware of non-mative plant species. (I non-mative species are <i>Sportion</i> , see page 27 or the landware of species are degree of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-	Gr. 1
d their website to include the list of Worldands of High Vor—Go to SC2.2 (No)—Go to SC2.3 (No)—Go to SC2.3 (No)—Go to SC2.3 (No)—Go to SC2.3 (No)—Go to SC2.3 (No)—Go to SC2.3 (No)—Go to SC2.3 (No)—Go to SC2.3 (No)—Go to SC2.4 (No)—Go to SC2.4 (No)—Not a WHCV with Her Lange wetland? 3. Whith PANDIN B and go to SC2.4 (No)—Not a WHCV or a Category! 4. Whith and go to SC2.4 (No)—Not a WHCV or a Category! 5. Westland of High Conservation (No)—Go to WHCV or the wetland based on its function: 11 horizons, either peats or mucks, that compace 16 in or Ves—Go to SC3.3 (No—Go to SC3.2 No—Go to SC3.2 (No—Go to SC3.3 (No—Go to SC3.3 No—Go to SC3.3 (No—Go to SC3.3 No—Go to SC3.3 (No = E ante a bog No—Go to SC3.3 (No = E	mowed grassland. — The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. Yes \mathbf{x} Category I No \mathbf{x} Category II	= 35
Vos actions are weuland within the 3/17 to 30 You cannot be considered the welland within the 3/17 to 30 You cannot be considered to the welland within the welland to the unit inneet both the criteria for soils and vegetation in begs? Use the key if you canswer YES you will still need to rate the wetland based on its junctions. If you canswer YES you will still need to rate the wetland based on its junctions. If you can canswer YES you will still need to rate the wetland based on its junctions. If you can can well the wetland unit have organic soils, either posts or mulcs, that are fasting on to 96.3 a lake or ordered, or an impermeable hardpan such as elso you volcanic act, or that are fasting on top of a lake or ordered, or an impermeable hardpan such as elso you volcanic act, or that are fasting on top of a lake or or of plant species listed in Table 4? Yes—Go to SC 3.3 No = is not a bog of the wards of the well of the wards of mostes at ground level, AND at least a 30% of plant species listed in Table 4? Yes—Go to SC 3.4 Yes—Go t	d their website to indude the list. Yes = Got SC 2.2 Ind of High Conservation Value? Yes = Category I ains a Natural Heritago wetland? Thewartands.edi MINHOVNOIN and 80 80 8 CZ 44 A WANDA CA High Conception.	Car. I
a by	SC 3.0. Bogs SC 3.0. Bogs Does the wother for any part of the unit) meet both the criteria for solis and vegetation in bogs? Use the key bolow, if you answer YES you will still need to rate the wetland based on list functions. SC 3.1. Boes an area within the wetland unit have organic soil horizons, either posts or mucks, that compose 16 in or more of the first 32 in of the soil profile? SC 3.2. Does an area within the wetland unit have organic soils, either posts or mucks, that are less than 16 in deep source befored, or a minpermeable hardpan such as day of volcanic ach, or that are floating on top of a lake or pond? SC 3.3. Does an area with pasts or mucks have more than 70% cover of moses at ground kevel, And a least a 30% second or hardpan such as day of volcanic ach, or that are floating on top of a lake or pond? SC 3.3. Does an area with pasts or mucks have more than 70% cover of moses at ground kevel, And a least a 30% on a second indirection than 30% on the second pond? SC 3.3. Does an area with pasts or mucks have more than 70% cover of moses at ground kevel, And a thosas a 30% one of name reaching on use 1. SC 3.4.	
western hemiock, lodgepole pine, quaking aspon, Engelmann spruco, or western white pine, AND any of the species (or combination of species) listed in Table 4 provide more than 30% of the cover under the canopy? Yes = Is a Category I bog No 9/1s not a bog	NOTE: If you are uncertain about the extent of mozzos in the understory, you may substitute that criterion by moscuring the pH of the water that scopes into a hole dug at loast 16 in deep. If the pH is less than 5.0 and the parauring the pH of the water that scopes into a hole dug at loast 16 in deep. If the pH is less than 5.0 and the plant species in Table 4 are present, the wetland is a bog. SCB.4. Is an area with posts or mades freezed > 30% cover) with Sittle spruce, substitute white phis, AND any of the vector in benicek, lodgepole pine, quadring aspen, Engelmann spruce, or western white phis, AND any of the species (or combination of species) listed in Table 4 provide more than 30% of the cover upder the canopy?	Cat. I

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Wetland name or number

Wetland name or number ______SC4.0. Forested Wetlands _______ Does the wetland have at least 1_continued

	The second secon
ナスス	Category of wetland based on Special Characteristics If you answered No for all tynns, entiry "Not amilitating" as commending."
Ş	Yes = Category III No = Category IV
ğ	SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a mosalc of wetlands that is between 0.1 and 1 ac?
	for the three aspects of function)? SC 6.2. Is the wedland I ac or larger, or is it in a mosale of wedlands that is I ac or larger?
ër :	ores an 8 or 9 for the habitat functi
	Yes - Go to SC 6.1 No = not an interdunal wetland for rating
ŧ	Grayland-Westport: Lands west of SR 1105 Ocean Shores-Copalis: Lands west of SR 115 and SR 109
	You wasw yis you wan stall freed to fate the wetland based on its habitat functions. In practical terms that monature following geographic areas: — Long Boach Peninsula: Lands west of St. 103
	SC 6.0. Interdunal Wetlands is the wetland west of the 1889 line falso collect the Western Boundary of Inches of the London Section of the 1889 line falso collect the Western Boundary of Inches of the 1889 line falso collect the Western Boundary of Inches of the 1889 line falso collect the Western Boundary of Inches of the 1889 line falso collect the Western Boundary of the 1889 line falso collect the Western Boundary of the 1889 line falso collect the Western Boundary of the 1889 line falso collect the Western Boundary of the 1889 line falso collect the Western Boundary of the 1889 line falso collect the Western Boundary of the 1889 line falso collect the Western Boundary of the 1889 line falso collect the Western Boundary of the 1889 line falso collect the Western Boundary of the 1889 line falso collect the Western Boundary of the 1889 line falso collect the Western Boundary of the 1889 line falso collect the 1
	Yes a Category I No a Category II
	mowed grasdland, — The wedand is larger than ½, ac (4350 ft?)
2,12	Than 20% cover of agreement when the profile defining fulfilling, cultivation, grazing), and has less than 20% cover of agreement, opportunistic plant species (see list of species on p. 100.) — At least X of the landward edge of the wordland has a 100 ft buffer of Africia ferrer, or innerstand some
i	SCS.1. Does the wetland maet all of the following three conditions?
į	— The lagoon in which the wedand is located contains ponded water that is saline or bracksh (> 0.5 ppt) during most of the year in at least a portion of the lagon (growlet to be more and a portion of the lagon).
	— The wedand lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or jess frequently, rocks
	SCS.0. Wetlands in Coastal Lagoons Does the wetland more all of the following makes a second
ë.	Yos = Catogory I (No r Not a forested wetland for this section
	makes to the Salayers of the Catodae Lifes; Sands where the largest trees are 80-200 years old OR the speeder that make up the canopy have an average dlametor (dph) exceeding 21 in (53 cm).
	age OR have a diameter at breast holpfut (dbh) of 32 in (81 cm) or more.
	— Old-growth forests (west of Cascado crest): Stands of at least two tree species, forming a multi-layered
	Department of Fish and Wildlife's forests as priority habitats? If you answer YES you will still need to rate the wetland based on its functions.
	Does the wetland have at least 1 continuous acre of forest that meets one of these criteria for the WA

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	4.	

Date of site visit: 6|4|22 - Lux Frained by Ecology? Ales No Date of training 2015 Wetland has multiple HGM classes?____Y__ RATING SUMMARY – Western Washington
Name of wetland (or ID#): Lind ship Cology Less No Date of training
Rated by モルハール・トレン・エートル・アート Rated by Ecology? Less No Date of training HGM Class used for rating ろくつこ

NOTE: Form is not complete without the figures requested (figures can be combined). Source of base aerial photo/map

OVERALL WETLAND CATEGORY — (based on functions or special characteristics)

1. Category of wetland based on FUNCTIONS

Category II - Total score = 20 - 22 _Category I - Total score = 23 - 27

Category III - Total score = 16 - 19 _Category IV - Total score = 9 - 15

FUNCTION	Improving Water Quality	•	ydrologic		Habitat	
	1		Circle the appropriate i	propri	ate ratings	
Site Potential	(1) W H	工	Ð ≥	Ŧ	<u>S</u>	_
Landscape Potential	- -	I	3	± (<u>></u>	
Value	TH M L	Ŧ.	(R	=)	Σ	TOTAL
Score Based on Ratings	4		V)		M	~0

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	п
Wetland of High Conservation Value	r
Bog	-
Mature Forest	I
Old Growth Forest	-
Coastal Lagoon	пп
Interdunal	м шп
None of the above	7
	_

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Score for each function based on three ratings (order of ratings is not important)

7 = H,H,L 7 = H,M,M 6 = H,M,L 6 = M,M,M 5 = H,L,L 5 = M,M,L 4 = M,L,L 3 = L,L,L 9 = H,H,H = 8

Slope Wetlands

serven sapure or let or i miles for wids in which third if the ord (from web.) Wetland Rating System for Western WA: 2014 Update
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Wetland name or number_

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Wap or:	To answer questions: Figure #
Cowardin plant classes	D1.3, H1.1, H1.4
Hydroperlods	D1.4, H1.2
Location of outlet (can be added to map of hydroperiods)	01.1, 04.1
Boundary of area within 150 ft of the wetland (can be added to another figure)	0 2.2, 0 5,2
Map of the contributing basin	D 4.3, D 5.3
1 km Polygon: Area that extends 1 km from entire wetland edge - Including	H21, H22, H23
polygons for accessible habitat and undisturbed habitat	
Screen capture of map of 303(d) listed waters in basin (from Ecology website) D 3.1, D 3.2	D3.1, D3.2
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D3.3

Riverine Wetlands

H11, H14	
R1,2, R4.2	
R 2.2, R 2.3, R 5,2	
H21, H22, H23	
R3.2, R3.3	
4 10 1 10	.2 .3, K5.2 22, H2.3

take Fringe Wetlands

# DIDANGING INCOME IN THE PROPERTY OF THE PROP	TO CHICAGO CARCONO CITA CITA CITA CITA CITA CITA CITA CITA	
Cowardin plant classes	L1.1, L4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and horbaceous plants	11.2	Г
Boundary of area within 150 ft of the wetland (can be added to another figure)	12.2	Γ
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H21, H22, H23	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website) L3.1, L3.2	L3.1, L3.2	Γ
Screen canture of list of TMDI s for WRIA in which usit is found from work	0.01	Γ

The second secon	
Map'off (consistence and representations)	To answer questions: Figure #
plant classes	ı
Hydroperlods	H 1,2
Plant cover of dense trees, shrubs, and herbacoous plants	\$1.3
Plant cover of dense, rigid trees, shrubs, and herbaceous plants	54.1
(can be added to flaure above)	
Boundary of 150 ft buffer (can be added to another figure)	52.1, 55.1
1 km Polygon: Area that extends 1 km from entire wetland edge - Including	H2.1, H2.2, H2.3
polygons for accessible habitat and undisturbed habitat	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	53.1, 53.2
Serven capture of list of TMBLs for WRIA in which unit is found (from web)	633



HGM Classification of Wetlands in Western Washington

For questions 1-7, the criteria described must apply to the entire unit being rated

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1-7 apply, and go to Question 8.

Are the water levels in the entire unit usually controlled by tides except during floods?

/go to 2 $\sqrt{\text{oN}}$

YES - the wetland class is Tidal Fringe - go to 1,1

1.1 Is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

NO – Saltwater Tidal Fringe (Estuarine)

lf your wetland can be classified as a Freshwater Tidal Fringe use the forms for **Riverine** wetlands. If it is Saltwater Tidal Fringe it is an **Estuarine** wetland and is not scored. This method **cannot** be used to YES - Freshwater Tidal Fringe score functions for estuarine wetlands The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit.

NO) go to 3 Tyour wetland can be classified as a Flats wetland, use the form for **Depressional** wetlands.

YES - The wetland class is Flats

3. Does the entire wetland unit meet all of the following criteria?

The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size; ttleast 30% of the open water area is deeper than 6.6 ft (2 m).

NO/go to 4

YES - The wetland class is Lake Fringe (Lacustrine Fringe)

Does the entire wetland unit meet all of the following criteria?

The wettand is on a slope (slope can be very graduaf),

The water flows through the wettand in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks, The water leaves the wedand without being impounded.

NO - go to 5

The wetland class is Slope YES-

shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft NOTE: Surface water does not pond in these type of wetlands except occasionally in very small and

Does the entire wetland unit meet all of the following criteria? ທ່

___The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,

The overbank flooding occurs at least once every 2 years.

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NOTE: The Riverine unit can contain depressions that are filled with water when the river is not YES - The wetland class is Riverine NO - go to 6 flooding

surface, at some time during the year? This means that any outlet, if present, is higher than the interior Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the of the wetiand. Ģ.

NO - go to 7

YES - The wetland class is Depressional

maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural Is the entire wetland unit located in a very flat area with no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be outlet ۲,

NO - go to 8

YES – The wetland class is Depressional

stream within a Depressional wedand has a zone of flooding along its sides. GO BACKAND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the wetland unit being scored. classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small Your wetland unit seems to be difficult to classify and probably contains several different HGM ထံ

more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area. NOTE: Use this table only if the class that is recommended in the second column represents 10% or

HGM classes within the wetland unit being rated	HGM class to use in rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slopė + Lake Fringe	Lake Fringe
Depressional + Riverine along stream	Depressional
within boundary of depression	
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other	Treat as
class of freshwater wetland	ESTUARINE

If you are still unable to determine which of the above criteria apply to your wetland, or if you have more than 2 HGM classes within a wetland boundary, classify the wetland as Depressional for the rating.

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	`	/						
y.			_	\	\	_		ne first page
rove water quality			polnts = 6	points = 3	points ⊭ 1	points # 0	reton that results in the highest to herbaceous plants can be giften not include squartic bod. points = 6 points = 6 points = 7 points = 3 points = 3 points = 3 points = 3 points = 3 points = 3 points = 3 points = 3 points = 3 points = 3 points = 3 points = 3	Record the rating on the first page
WETLANDS he site functions to imp	נע?	Cowardin classes):					opriste description that rea if covering. The herbaceous memunity. These are not a baceous does not include a herbaceous does not include a Add the poin	Ja E
LAKE FRINGE WETLANDS - Indicators that the site function	Improve water quali	shore (use polygons of	•	and <33 ft	nd <16 ft		land: Choose the appreciation of the choose the appreciation of the choose of the choo	# 47 m
<u>LAKE FRINGE WETLANDS</u> Water Quality Functions - Indicators that the site functions to improve water quality	L 1.0. Does the site have the potential to improve water quality?	L 1.1. Average width of plants along the lakeshore (use polygons of Cowardin classics);	Plants are more than 33 ft (10 m) wide	Plants are more than 16 ft (5 m) wide and <33 ft	Plants are more than 6 ft (2 m) wide and <16 ft	Plants are less than 6 ft wide	L 1.2. Obsracteristics of the plants in the wetland: Groose the appropriate description that results in the highest politics, and do not include any open water in your estimate of chorerage. The behavesous plants can be officer to deminant from or as an understooy in a shub or forest community. These are not Cowerdin classes. Area of cower is total cower in the unit, but it can be in patches. Herbaceous does not include aquatic bad. Gover of herbaceous plants is 590% of the vegatated area cover of herbaceous plants is 59% of the vegatated area of herbaceous plants is 5½, of the vegatated area of herbaceous plants is 5½, of the vegatated area of herbaceous plants is 5½, of the vegatated area of herbaceous plants is 5½, of the vegatated area of herbaceous plants is 50% of the vegatated area of herbaceous plants is 50% of the vegatated area of herbaceous plants is 50% of the vegatated area of herbaceous plants is 50% of the vegatated area of herbaceous plants is 50% of the vegatated area of herbaceous plants is 60% of the vegatated area of herbaceous plants is 60% of the vegatated area of herbaceous plants is 60% of the vegatated area of herbaceous plants is 60% of the vegatated area of herbaceous plants is 60% of the vegatated area of herbaceous plants is 60% of the vegatated area of herbaceous plants in the boxes above a total open water cover 5% of the unit.	Rating of Site Potential If score is: 8-12 # H 4-7 # M D-3 # V
	L 1.0. Doc	L1.1 Aver	Pion	Plan	neld	Plan	L12. Chara point the d of en Cover Cove Cover Cove Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cov	Kating of 5

1.2.0. Does the landscape have the potential to support the water quality function of the site?	er quality function of the site?
L 2.1. is the lake used by power boats?	Yes #1 No # 0
L 2.2. is > 10% of the area within 150 ft of wetland upft on the upland side in land usos that generate pollutants?	side in land usos that generate pollutants?
	Yes = 1 No = 0
L.2.3. Does the lake have problems with algal blooms or excessive plant growth such as milfoli? Yes # 1 No # 0	it growth such as milfell? Yes = 1 No = 0
Total for L 2	Add the points in the boxes above
Rating of Landscape Potential: If acore is: 2 or 3 = H 1 = M 0 = L	0 = L Record the rating on the first page

L 3.0. Is the water quality improvement provided by the site valuable to society?	lety?
L3.1. is the lake on the 303(d) list of degraded aquatic resources?	Yes m 1 No m 0
L 3.2. is the lake lin's sub-basin where wator quality is an issue (at least one aquatic resource in the basin is on the 303(d) lid()? Yes = 1. No =	resource in the basin is on the
L3.3. Has the site been identified in a vatershod or local plan as important for maintaining water quality? Answer YES if there is a TMDL for the take or basia in which the unit is found.	ntaining water quality? Answer YES Yes = 2 No = 0
Total/for L 3	Add the points in the boxes above
Rating of Value If score is: 2-4 = H1 = M _ 0 = L	Record the rating on the first page

ng of Value if score is:__2-4 = H _____1 = M ___0 = L

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1.4.1. Distance along shore and average width of Cowardin classes along the lakeshore (do not include Aquatic bod): Choose the highest scening description that matches conditions in the wetland.
> % of distance is Sarub-shrub or Forested at least 33 ft (10 m) wide
7.7 of distance is Scrub-shrub or Forested at losst 33 ft (2 m) wide > % distance is Scrub-shrub or Forested at losst 33 ft (10 m) wide
\
Plants are less than 6 ft (2 m) wide (any type except Aquatic bed) points = 0
0-5 = L Record the rating on the first page
L.S.O. Does the landscape have the potential to support the hydrologic functions of the site?
L5.1, is the lake used by power boats with more than 10 hp? Yes ≠1 No ≠0
LS.2. is the fetch on the take side of the unitat least 1 mile in distance?
Add the points in the boxes above
J = M O = L Record the rating on the first page
L. 6.0. Are the hydrojogic functions provided by the site valuable to society?
L6.1. Are there-efficient as a long the shore that can be impacted by eresion? If more than one resource is present, choose the one with the highest score.
There are human structures or old growth/mature forests within 25 ft of OHWIM of the shore in the unit
points a 2
There are nature trails or other paths and recreational activities within 25 ft of OHWM points = 1
Other resources that could be impacted by erosion
There are no resources that can be impacted by erosion along the shores of the unit

NOTES and FIELD OBSERVATIONS:

O 0 points = 2 Slope is greater than 5% points and 12. The soil 2 in below, the surface for duff layer! is true clay or true organic (use NRCS definitions); Yes = 3. Now 0) 5.1.3. Characteristics of the plants in the wetland that trap sceliments and poliutants: Characteristics of the plants in the wetland that trap sceliments and poliutants: Characteristics of the plants in the wetland that the sceliments are supported for the description that best fits the plants in the wetland. Dense means you have trouble seeing the soil surface (>725% cover), and uncut means not grazed or mowed and plants are higher than 6 in. points = 1 Water Quality Functions - Indicators that the site functions to improve water quality 5.10. Does the site have the potential to improve water quality? points = 6 points = 3 points = 2 Add the points in the boxes above 5.1.1. Chanacentsics of the average slope of the wetland: (a 1% slope has a 1 ft vertical drop in elevation for every 100 ft of horizontal distance) Slope is 1% or less SLOPE WETLANDS Donse, uncut, herbaceous plants > 90% of the wetland area Dense, uncut, herbaceous plants > X of area Dense, woody, plants > % of area Dense, uncut, herbaceous plants > % of area Does not meet any of the criteria above for plants. Slope is > 1%-2% Slope is > 2%-5% Total for S 1

Record the rating on the first page O Yes = 1 No(£0) 5.2.1. is > 10% of the area within 150 ft on the upbill side of the wetland in land uses that generate pollutges;? Yes/a 1. No w 0. Add the points in the boxes above \$ 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question \$ 2.1? S 2.0. Does the landscape have the potential to support the water quality function of the site? Rating of Site Potential if score is: 12 m H 6-11 m M 0-5 m L Other sources Total for S 2

Rating of Landscape Potential If score is: 1-2 a M ___ 0 a L

Record the rating on the first page

Record the rating on the first page Q Ŋ 53.2. Is the wetland in a basin or sub-basin whore water quality is an issue? At least one aquetic resource in the basin is on the 303(d) list.

You $\in \mathcal{Y}$ No = 05.3.3. Has the site been identified in a water-shed or local plan as important for maintaining water quality? Agawer YES if there is a TMDL for the basin in which unit is found.

You $\in \mathcal{Y}$ 53.1. Does the wettand discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list? Add the points in the boxes above S 3.0. Is the water quality improvement provided by the site valuable to society? Rating of Value If score is 2-4 = H 1 = M 0 = L Total for 53

Wetland name or number __

SLOPE WETLANDS

he first page	Record the rating on the first page	Rating of Value if scorols: 24 a H Z 1 a M D a L
	Add the points in the boxes above	Total for S 6
0	o in a regional flood control plan?	S 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? Yes = 2. No #0.
	points (1	Surface flooding problems are in a sub-basin farther down-gradient No flooding problems anywhere counstream
	points # 2	natural resources (e.g., houses or sulmon redds)
	esult in damage to human or	The sub-basin immediately down-gradient of site has flooding problems that result in damage to human or
		S.6.1. Distance to the nearest areas downstream that have flooding problems;
		S 6.0. Are the hydrologic functions provided by the site valuable to society?
he first pag	Record the rating on the first page	Rating of Landscape Potential If score is 12 = M0 = L
	cover that gondrate excess Yes = 1 No = 0	55.1. Is more than 25% of the area within 150 ft upslope of wetland in land uses or cover that generate excess surface runoff?
	ons of the site?	S 5.0. Does the landscape have the potential to support the hydrologic functions of the site?
the first pag	Record the rathig on the first page	Rating of Site Potential If score is: $1 = M \frac{V_0}{V} 0 = 1$.
0	points # 1	Dense, uncut, rigid plants cover > 90% of the area of the wetland All other conditions
		in), or dense enough, to remain crect during surface flows.
	s: Choose the points appropriate ould be thick enough (usually > 1/8	$5.4.1$. Characteristics of plants that reduce the velocity of surface flows during storms: Choose the points appropriate for the description that best fits conditions in the wetland, Stems of plants should be thick enough (usually > $\frac{1}{3}$).
	P	S 4.0. Does the site have the potential to reduce flooding and stream erosion?
lon	luce flooding and stream eros	Hydrologic Functions - Indicators that the site functions to reduce flooding and stream erosion

NOTES and FIELD OBSERVATIONS:

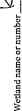
HABITAT FUNCTIONS - Indicators that site functions to provide important habitat	
H 1.0. Does the site have the potential to provide habitat?	
H 11. Structure of plant community; indicators are Cowardin classes and strate within the Fenested class. Check the Cowardin plant classes in the welland, Up to 10 patches may be combined for each class to meet the threshold of % or or more than 10% of the unit if it is smaller than 2.5 oz. Add the number of structures checked. Agastic bed Agastic bed Agrantic bed Saructures or more points = 4 Saructures; points = 2 Saructures; points = 3 Saructures; poi	0
H 1.2. Hydroperlods Check the types of water regimes (hydroperlods) present within the wethand. The water regime has to cover more types of the wethand or M se to count (see text for descriptions of hydroperiods). Permanenty flooded or inundated Seasonally flooded or inundated Substrated only Substrated only Substrated only Substrated only Seasonally flowing stream or fiver in, or adjacent to, the wetland Seasonally flowing stream in, or adjacent to, the wetland Lake Fringe wetland 2 points Prophysical wetland 2 points Prophysical wetland 2 points	
H 13. Richnoss of plant species Court in the number of plant species in the wetland that cover at least 10 ft? Court in number of the same species can be combined to meet the size threshold and you do not have to name Different packies of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian miljoil, read canarygrass, purple loosestrife, Canadian thistie If you counted > 13 species 5 - 13 species 5 - 15 species C 5 species	» (C
H.1.4. Intersportion of habitats Deddo from the diagrams below whether interspersion among Cowardin plants classes (described in H.1.1), or the diasses and unvegetated areas (can include open water or multitral) is high, moderate, low, or none. If you have four or more plant classes or three classes and open water, the rating is always high. None four or more plant classes or three classes and open water, the rating is always high. None four or more plant classes or three classes and open water, the rating is always high. None four or more plant classes or three classes and open water, the rating is always high. None four or more plant classes or three classes and open water, the rating is always high.	0

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(1 m)	Accord the rating on the first page	boints = 3 points = 2 points = 2 points = 1	points = 3 points = 3 points = 2 points = 2 points = (2) points = (2) points = (2)	Record the rating on the first page	heat score denai lists) co to to points = 1
and 6 ft long. and 6 ft long. and 6 ft long. and 6 ft long. fload 33 ft (10 m) r muskers for doming (> 30 de, r mes that have not yet weath are present in reast that are y amphiblans; ratum of plants (see H 1.1 for file	Add the points in the boxes above Record the rating		ntensity land uses)/21 = 3	Record the r	oolleles? Choose only the higher pol pol to state or feder to reder to animal on the state or feder lonal comprehensive plan, in a pol pol pol pol pol pol pol pol pol pol
Greek the habitatives that are present in the wetland. The number of checks is the number of points. Lurge, downed, woody debrit within the wetland () 4 in diameter and 6 kt long). Large, downed, woody debrit within the wetland () 4 in diameter and 6 kt long). Large, downed, woody debrit within the wetland () 4 in diameter and 6 kt long). Sability to the control of the contr	Rading of Site Potential If score is: 15-18 = H 7-44 = M 206 = L	H 2.0. Does the landscape have the potential to support the habitat functions of the site? H 2.1. Accossible habitat (Include only habitat that directly abuts wedond unit). Colculate: Sundisturbed habitat = { Sundisturbed habitat { Sunderate and low intensity land uses}/2 { Sunderate and l	and the wetland. 1 2 / 1/8 moderate an 1 2 / 2 / 3 patches. 3 patches and the same and the sam	Rating of Landscape Potential If score is46=H3.8 = MV<1 = 1.4.3.0. Is the habitat provided by the site valuable to society?	H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? Choose only the highest score detapplies to the wetand being retured. Sipp meets Aviv of the following citeria: It has 3 or more priority habitats within 100 m (see nost page) It has 3 or more priority habitats within 100 m (see nost page) It is mapped as a location for an individual bloby priority species. It is mapped as a location for an individual bloby priority species. It is a been categorized as an important habitat site in a local or regional comprehensive plan, in a Shoreline nataset plan, or in a watershed plan Step has 1 or 2 priority habitats (fisted on mest page) within 100 m Site does not meet any office citeria above



WDFW Priority Habitats

Priority habitats listed by WDFW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in Washington Department of Fish and Wildlife, 2008. Priority Habitat and Species List: Olympia, Washington, 177 pp. http://wdfw.wa.gov/anbitations/20165/wdfw.00165.pdf or access the list from here: http://wdfw.wa.gov/conservations/pbis/list/).

Count how many of the following priority habitats are within 330 ft (100 m) of the wetland unit: NOTE: This question is independent of the land use between the wetland unit and the priority habitat.

- Aspen Stands: Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- Blodiversity Areas and Corridors: Areas of habitat that are relatively important to various species of native fish and
 wildlife (full descriptions in WDFW PHS report).
- Herbaccous Balds: Variable size patches of grass and forbs on shallow solls over bedrock.
- Old-growth/Mature forests: <u>Old-growth west of Casende crest</u> Stands of at least 2 tree species, forming a multilayered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) > 52 in (81 cm) dah or > 200 years of ago, <u>Mature forests</u> - Stands with average diameteries exceeding 21 in (53 cm) dah; crown cover may be less than 100% decay, decadence, numbers of smags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.
- Ofcegon White Dake Woodiand stands of pure oak or oak/conflor associations where canopy coverage of the oak component is important (full descriptions in WDFW PHS report p. 158 see web link above).
- Riportian: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and
 terrestrial ecosystems which mutually influence each other.
- Westside Prairies: Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet
 piraltic (dull descriptions in WBFW PHS report p, 161 see web link above).
- Instream: The combination of physical, biological, and chemical processes and conditions that interact to provide
 functional life history requirements for instream fish and wildlife resources.
- Mearshore: Relatively undisturbed nearshore habitats. These Include Coastal Nearshore, Open Coast Nearshore, and
 Puget Sound Nearshore. (full descriptions of habitats and the definition of relatively undisturbed are in WDFW report see web link on previous page).
- Caves: A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, tee, or other geological formations and is large enough to contain a human.
- --- Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.
- Talues Homogenous areas of rock rubble ranging in average size 0.5 6.5 ft (0.15 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap silders and mine ballings. May be associated with cilifs.
 - Snags and Logs: Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to
 enable cavity exervation/use by wildlife. Priority snags have a diameter at breast height of > 20 in [51 cm] in western
 Washington and are > 6.5 ft [2 m] in height. Prfority logs are > 12 in [30 cm] in diameter at the largest end, and > 20 ft
 (6 m) long.

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed

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CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Check off any criteria that apply to the wedand. Circle the category when the appropriate criteria are met.	
SC 1.0. Estuarine wetlands	
Does the wetland meet the following criteria for Estuarine wetlands?	
The dominant water regime is tidal,	
— With a salinity greater than 0.5 ppt Yes —Go to 5C 1.1 Not an estuarine wetland	
fe Refuge, National Park, National Estu	
Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151? Yes = Category 1 No - Go to SC 1.2	ž
SC 1.2. Is the wetland unit at least 1 ac in size and moets at least two of the following three conditions?	
The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less	ŧ
than 10% cover of non-native plant species. (If non-native species are <i>Sparting</i> , see page 25)	;
— Activate, A of the latrawal uleage of the wedails has a two it builted of shints, forest, of ulregiated of ulremment mowed grassland.	
— The wetland has at least two of the following features: tidal channels, depressions with open water, or	= : :
1 109aun - 601	
SC Z.U. Wodands of High Conservation Value (WHCV)	
Securities the Web Depart therite of regular resocutions updated their website to financial the fact of No-Go to SC2.3 (Securities No-Go to SC2.3)	G.
on the WDNR database as a Wetland of High Conservation Value?	
Yes a Catagory I No a MHCV	
SULZES is the Wedanta in a Society'i Ownship/Range that contains a Matural Heritage Wedanta? After-/Javasa/ discuss anu/aha/forfdets/datascarch/Janhauathack ndf	
Yos - Contact WNHP/WDNR and go to SC2.4 No PNot a WHCV	
itified the wetland within the S/T/R as a Wetland of High Conservation Valu	
their website? No = Nota WHCV	
SC3.0. Bogs	
Does the wetland (or any part of the unit) most both the criteria for soils and vegetation in bogs? Use the key	
egiow. If you arswer res you will stall need to rate the wealth based on its Junctions.	
SCIST, Does an area within the wedang tinit have organic soil norizons, either peats or mucks, that compose 16 in or names at the soil nearly and the contract of the contract	
SCESE. Does all alea within the would thin have organic solls, child peaks of mounts, and are less than being occup. Over bedrock, or an impermeable hardban such as day or volcanic ash, or that are floating on too of a lake or	
pond? Yes-Go to SC3.3 No = Is not a bog	
more than 70% cover of mosses at ground level, A	
cover of plant species listed in Table 4? Yes with a Category I bog No - Go to SC 3.4	
NOTE. If you are unitervaling about the expert of investment of the black of your half substitute that children by measuring the pH of the water that seeps into a hole dug at least 16 in doep. If the pH is less than 5.0 and the	
plant species in Table 4 are present, the wotland is a bog.	- 5
SC3.4. Is an area with poats or mucks forested (> 30% cover) with Sitka spruce, subalpine fit, western red cedar,	
weater Heimow, loogopole plus, quaking appur, angenitatin sprace, or weatern white pine, has any or use species (or combination of species) listed in Table 4 provide more than 30% of the cover under the canopy?	
Yes a 18 a Catagory 1 bog / No # 18 not a bog	

SC 4.0. Forested Werlands	
Doos the wetland have at least <u>1 continuous acre</u> of forest that meets one of these enterla for the WA Department of Fila and Wildlife's forests as priority habitats? If you answer YES you will still need to rate the wetland based on its functions.	
— Old-growth forests (vect of Cascade creet): Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac [20 trees/ha) that are at least 200 years of age OR have a diameter at breast height (deh) of \$21 in [82 cm] or more.	
- Mature forests (west of the Cascade Crest): Stands where the largest trees are 80-200 years old OR the species that make up the canopy have an average diameter (Abr) exceeding 21 in (53 cm). Ver Presented And Marie (Abrilla 1997)	į
⊿	5
Does the wortland meet all of the following criteria of a weetland in a coastal lagoon? — The weetland lies in a degression adjacent to marino waters that is wholly or partially separated from	
makine waters by sandbanks, gravel banks, shingle, or, loss frequently, rocke — The Jagoon in which the westland is located contenting ponded watergitust is saline or braskish (> 0.5 ppt) during mest of the year! in a fleast a partien of the Jagoon (needsige by measured near the bottom)	ij
Yes – Go to SC 5.1. Not a wetland meet all of the following three conditions?	
— The wetland is relatively undisturbed (has no diking, ditching, filling, cutivation, grazing), and has less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100).	S, E
The wetland is larger than ¹ /1,0 ac (4350 ft²) Yes ≈ Category! No ≈ Category!	
SC 6.0. Interdunal Wetlands	
Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? If you naswer yes you will still need to rate the wetland based on its habitat functions. In practical terms that means the following geographic areas: — Lam Boach Perintuis: Law west of KB 178	
Grayland-Westport: Lands west of SR 105	ភី
— Octoan Shlores-Copalie: Lands west of \$8 115 and \$8 1199 Yes – Go to \$C 6.1 (No y not an interdunal wetland for rating	
SC 6.1. Is the wedland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H,H,H or H,H,IM for the three assects of function?	Cet.
t in a mosaic of wetlands that is 1 ac	
Yes = Catagary II No - Ga to SC 6.3 SC 6.3. is the unit between 0.1 and 1 ac, or is it in a mosaic of wedands that is between 0.1 and 1 ac?	S E
Yes = Category III No = Category IV	

Wetland name or number_____

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Wotland Rating System for Western WA: 2014 Update Rating Form – Effective January 1, 2015

Wetland Rating System for Western WA: 2014 Update Rating Form – Effective January 1, 2015

RATING SUMMARY – Western Washington

Name of wetland (or 10 #): Lands Mill & Lands Andread by Ecology? Layes No Date of training 201 HGM Classes used for rating 201 Wetland has multiple HGM classes?

NOTE: Form is not complete without the figures requested (figures can be combined).

OVERALL WETLAND CATEGORY (based on functions or special characteristics)

1. Category of wetland based on FUNCTIONS Category I – Total score = 23 - 27

Category IV – Total score = 9 - 15
FUNCTION Improving Hydrologic Habit

Score for each function based on three ratings (order of ratings is not important)

				TOTAL	Ü
Ħ	Soun	3	3	_	
Habit:	Circle the appropriate ratings	Σ	Σ	Σ	M
	propri	r	_æ (Ξ)	,
ည	do ou	0	_		١.
lydrologic	Circle	Σ	3	ѯ)	VI
Ť		Ξ	I	x	
ng alley	i	r	٦.	_1	
mproving ater Qualin	4	Ø	2	Σ	4
m w) н	Ŧ	\pm	•
			rtlal 🏒)	
FUNCTION		<u></u>	andscape Potential		uo p
FUNC	ļ	Site Potential	cape		Base
		Site P	Lands	Value	Score Based on Ratings

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	1 11
Wetland of High Conservation Value	1
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	п
Interdunal	м шп
None of the above)

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Wetland name or number

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions: Figure #
Cowardin plant classes	D1.3, H11, H1,4
Hydroperiods	D14, H1,2
Location of outlet (can be added to map of hydroperiods)	51.1, 54.1
Boundary of area within 150 ft of the wetland (can be added to another flaure)	02.2, 05.2
Map of the contributing basin	D4.3, D5.3
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H2.1. H2.2. H2.3
polygons for accessible habitat and undisturbed habitat	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D3.1. D3.2
Scroen capture of list of TMDLs for WRIA in which unit is found (from web)	D3.3

Riverine Wetlands

Wap of	To answer questions: Fig.	Florere #
Cowardin plant classes	t	
Hydroperiods	H12	
Ponded depressions	81.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	R 2,4	ĺ
Plant cover of trees, shrubs, and herbaccous plants	R 1,2, R 4,2	-
Width of unit vs. width of stream (can be added to another figure)	R4.1	
Map of the contributing basin	R22, R23, R5,2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H21, H22, H23	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R3.1	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	R3.2, R3.3	
		1

Lake Fringe Wetlands

9 8 H H, H 8 H H, H 7 H H, H, L 7 H H, H, L 6 H H, M, L 6 H M, L 5 H H, L 4 H M, L 4 H M, L 3 H M, L 3 H M, L 4 H M, L 3 H M, L 3 H M, L 3 H M, L 3 H M, L 3 H M, L 3 H M, L 3 H M, L 3 H M, L 3 H M, L 3 H M, L 3 H M, L 3 H M, L 3 H M, L 3 H M, L 3 H M, L 4 H M, L 3 H M, L 4 H M, L 5 H M, L 6 H M, L 6 H M, L 7

	To answer questions: Figure #	្
Cowardin plant classes	11.1. L4.1. H1.1. H1.4	Т
Plant cover of trees, shrubs, and horbaceous plants	1.1.2	Т
Boundary of area within 150 ft of the wetland (can be added to another flaure)	12.2	Ţ
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H21 H22 H23	Т
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	131.13.2	Τ
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	133	Ţ
		٦

Slope Wetlands

Mapof:	To answer questions:	Figure 3
Cowardin plant classes	H11 H14	
Hydroperiods	H12	
Plant cover of dense trees, shrubs, and herbaceous plants	\$13	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants	541	
(can be added to flaure above)	!	
Boundary of 150 ft buffer (can be added to another figure)	52.1.55.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H21 H22 H23	
polygons for accessible habitat and undisturbed habitat	200 11 /200 11 /200 11	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	\$3.1.53,2	
Scroen capture of list of TMDLs for WRIA in which unit is found (from web)	\$3.3	

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HGM Classification of Wetlands in Western Washington

probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you For questions 1-7, the criteria described must apply to the entire unit being rated. questions 1-7 apply, and go to Question 8.

Are the water levels in the entire unit usually controlled by tides except during floods?

NO- go to 2

YES - the wetland class is Tidal Fringe - go to 1.1

1.1 Is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

NO - Saltwater Tidal Fringe (Estuarine)

is Saltwater Tidal Pringe It is an **Estuarine** wetland and is not scored. This method cannot be used to score functions for estuarine wetland. YES - Freshwater Tidal Fringe

The entire wettand unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit.

MÓ-go to 3

YES - The wetland class is Flats

If your wetland can be classified as a Flats wetland, use the form for **Depressional** wetlands.

The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size; 3. Does the entire wetland unit meet all of the following criteria?

4t least 30% of the open water area is deeper than 6.6 ft (2 m)

YES – The wetland class is Lake Fringe (Lacustrine Fringe) NO/- go to 4

Does the entire wetland unit meet all of the following criteria?

The wetland is on a slope (slope can be very gradual),

The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks,

YES - The wetland class is Slope NO,4 go to 5

shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft NOTE: Surface water does not pond in these type of wetlands except occasionally in very small and deep).

Does the entire wetland unit meet all of the following criteria?

ιή

The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that

stream or river, The overbank flooding occurs at least once every 2 years.

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Wetland name or number

MOTE: The Riverine unit can contain depressions that are filled with water when the river is not YES - The wetland class is Riverine

flooding

NO ∮go to 6

is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the surface, at some time during the year? This means that any outlet, if present, is higher than the interior of the wetland.

NO - go to 7

YES -/The wetland class is Depressional

flooding? The unit does not pond surface water more than a few inches. The unit seems to be maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural Is the entire wetland unit located in a very flat area with no obvious depression and no overbank outlet

NO - go to 8

YES - The wetland class is Depressional

stream within a Depressional wedand has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small appropriate class to use for the rating system if you have several HGM classes present within the Your wettand unit seems to be difficult to classify and probably contains several different HGM wetland unit being scored.

more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the NOTE. Use this table only if the class that is recommended in the second column represents 10% or total area.

HGM classes within the wetland unit	HGM class to
being rated	use in rating
Slope + Riverine	Riverine
Slape + Depressional	Depressional
Slope + Lake Fringe	Lake Fringe
Depressional + Riverine along stream	Depressional
within boundary of depression	
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other	Treatas
class of freshwater wetland	ESTUARINE

If you are still unable to determine which of the above criteria apply to your wetland, or if you have **more than 2 HGM classes** within a wetland boundary, classify the wetland as Depressional for the rating.

	2	0	~	3	5
<u>DEPRESSIONAL AND FLATS WETLANDS</u> Water Quality Functions - Indicators that the site functions to improve water quality the site have the potential to improve water quality?	Characteristics of surface water outflows from the wetland: Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outled). Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing autlet. Points Points Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing litch. points = 1.		0.13. Characterizes, and distribution of percisient plants (femeront, Scrub-chrub, and/or Forested Cowardin dissees); Wetland has persistent, ungrazed, plants > 95% of area Wetland has persistent, ungrazed plants > 1/10.0 farea Points = 0	Characteristics of seasonal bonding or inungation: This is the area that is ponded for at least 2 months. See description in manual. Prof. seasonally ponded is > % total area of weetland Area seasonally ponded is > % total area of weetland Area seasonally ponded is > % total area of weetland Area seasonally ponded is < % total area of weetland Prof. seasonally ponded is < % total area of weetland	Add the points in the boxes above
DEPRESSIONAL AND FLA Water Quality Functions - Indicators that the sit 0.1.0. Does the site have the potential to improve water quality?	D.1.1. Chairsterieties of surface water outflows from the wetland: Wetland is a depression or flat depression (QUESTION 7 on Wetland has an intermittently flowing stream or disch, OR1 Wetland has an unconstricted, or slightly constricted, surfac Wetland is a flat depression (QUESTION 7 on key), whoso ou	21.2. The soil 2 in below the surface (1.3. Characteristics and distribution of percisions blants (Em Westand has persistent, ungrazed, plants > 95% of area Westand has persistent, ungrazed, plants > 1.0 of area Westand has persistent, ungrazed plants > 1.0 of area Westand has persistent, ungrazed plants > 1.0 of area Westand has persistent, ungrazed plants > 1.0 of area	2.4. <u>Chanderdisc</u> of seasonal ponding or iningation: This is the area that is ponded for at loost 2 months. Area seasonally ponded is > % total area of weetand. Area seasonally ponded is > % total area of weetand. Area seasonally ponded is > % total area of weetand. Area seasonally ponded is < % total area of weetand.	otal for D 1

Rating of Landscape Potential If score is: 3 or 4 = H 1 Lor 2 = M 0 = L Record the reting on the first page Record the rating on the first page D 2.2. is > 10% of the area within 150 ft of the wedland in land uses that generate pollutants? Yes #1 No #0
D 2.3. Are there septic systems within 250 ft of the wedland?
P 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1.D 2.3?

Source

Yes # 1 No #0

Total for D 2

Add the points in the boxes above D 2.0. Does the landscape have the potential to support the water quality function of the site? D 2.1. Does the wetland unit receive stormwater discharges? D 2.2, is > 10% of the area within 150 ft of the wedland in land uses that generate poliutants? Rating of Site Potential If score is: 12-16 = H (6-11 = M 0-5 = L

D 3.0. is the water quality improvement provided by the site valuable to society?

D 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stroam, river, lake, or marine water that is on the sold just?

D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list?

D 3.3. Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list?

Ver. = 4.0. No = 0

D 3.3. Has the site boon identified in a watershed or local plan as important for maintaining water quality (expore YES if there is o TMOL for the basin in which the unit is found?) Add the points in the boxes abovo Record the rating on the first page Total for D 3

Rating of Value If score is: 1/2-4 = H 1 = M 0 = L

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Wetland name or number

<u>DEPRESSIONAL AND FLATS WETLANDS</u> Hydrologic Functions - indicators that the site functions to reduce flooding and stream desmadation.	G
D 4.0. Does the site have the potential to reduce flooding and erosion?	
D 4.1. <u>Characteristics of surface water outflows from the wordand</u> : Wetland is a depression or flat depression with no surface water leaving it ino outlet) Wetland has an intermittently flowing green or of tite). OR highly constricted pormanently flowing outletpooline(= 2) Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing dirth points; = 1 Wetland has an uncontribled, or slightly constricted; surface outlet that is normanently flowing norms and points.	0
Pot A	
Marks of ponding between 2 ft to <3 ft from surface or bottom of outlet points = 5 Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet points = 3 The wetland is a "hosdwater" wetland Wetland is 18 but has small depressions on the surface that trap water points = 3 Wetland is 18th but has small depressions on the surface that trap water points = 1 Marks of ponding less than 0.5 ft (6 in)	0
<u>bution of the wetland to storing in the watershad;</u> Estimate the ratio of the areo of upstream buting surface water to the wetland to the areo of the wetland unit liself, as of the basin is less than 10 thnes the area of the unit as of the basin is 10 100 thnes the area of the unit can of the basin is in more than 100 thnes the area of the unit ea of the basin is more than 100 thnes the area of the unit wetland is in the Flats class.	M
Total for D 4 Add the points in the boxes above	М
Rating of Site Potential	first pag
D.S.1. Does the weetland receive stormwater discharges? Yes 1. No = 0	-
D 5.2. Is >10% of the area within 150 ft of the wedand in land uses that generate excess runoff? Yof ≠ 1 No = 0	
D 5.3. Is more than 25% of the contributing basin of the wetand covered with intensive human land uses (residential, as 1.1 residentes/5c, urban, commercial, agriculture, etc.)?	0
Total for D 5	4

port hydrologic functions of the site?
Part Does did weeding receive stormwatch discharges?
D 5.2. Is >10% of the area within 150 ft of the wedand in land uses that generate excess runoff? Yes #1 No = 0
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses [residential_at 2.5] >1 residence/3c, urban, commercial, agriculture, etc.]?
Add the points in the boxes above
Ruting of Landscape Potential Miscore is: 3 = H. Landscape Potential Miscore is: 3 = H. Landscape Ruting on the flist page
D 6.0. Are the hydrologic functions provided by the site valuable to society?
D 6.1. The unit is in a landscaper that has fooding problems. Choose the description that best matches conditions around the wedner unit being pracel. Do not end ploths. Spocset the lightness search inner than concentificing is met. The welland captures surface water that would otherwise flow down-gradient into areas where flooding has damaged human or natural resources (e.g., houses or salmon redds);
Fooding course in a sub-basin that it immediately down-gradient of unit. Surface flooding problems are in a sub-basin farther down-gradient. Fooding from groundwater is an issue in the sub-basin.
The existing or potential outflow from the wetland is so constrained by human or natural conditions that the water stored by the wetland cannot reach areas that flood. Explain why
ling downstream of the wetland. points = 0
portant for flood storage or flood conveyance in a regional flood control plan Yes = 2 Nord O
Add the points in the boxes above
Rating of Value If score is: 2.4 * H - 1 = M O = L
oce the fullibratiscour if more than one where flow down-gradient into areas w realmon reeds): It down-gradient of unit. Are down-gradient of unit. An. So constrained by human or natural of sood. Expain why the wetland. Add the points if

R.1.D. Does the site have the potential to Improve water quality? R.1.L. Area of surface degressions within the Riverine wetland that can trap sodiments during a flooding event: Depressions cover > ½, area of wetland Depressions present No depressions points = 8 points = 8 points = 9 point
ves of surface degressions within the Riverine wetland that can trap sodiments during a flooding event; Depressions cover >½ area of wetland Depressions cover >½ area of wetland Depressions present For surface of the wetland Trees or shrubes >½, area of the wetland Herbaceous plants > 6 in high > 2½, area of the wetland Herbaceous plants > 6 in high > 2½, area of the wetland Herbaceous plants > 6 in high > 2½, area of the wetland Herbaceous plants > 6 in high > 2½, area of the wetland Herbaceous plants > 6 in high > 2½, area of the wetland Herbaceous plants > 6 in high > 2½, area of the wetland Herbaceous plants > 6 in high > 2½, area of the wetland Herbaceous plants > 6 in high > 2½, area of the wetland Herbaceous plants > 6 in high > 2½, area of the wetland Herbaceous plants > 6 in high > 2½, area of the wetland Herbaceous plants > 6 in high > 2½, area of the wetland Herbaceous plants > 6 in high > 2½, area of the wetland Herbaceous plants > 6 in high > 2½, area of the wetland Herbaceous plants > 6 in high > 2½, area of the wetland Herbaceous plants > 6 in high > 2½, area of the wetland Herbaceous plants > 6 in high > 2½, area of the wetland Herbaceous plants > 6 in high > 2½, area of the wetland Herbaceous plants > 6 in high > 2½, area of the wetland Herbaceous plants > 6 in high > 2½, area of the wetland Doints = Add the points in the boxecs above Add the points = Add the points in the boxecs above Record the retirn of Site Potential if score is:
Depressions cover > ½, area of wetland Depressions cover > ½, area of wetland Depressions present that cover < ½ area of wetland Depressions present that cover < ½ area of wetland Needer-reasions present that cover < ½ area of wetland Needer-reasions present that owetland (needer-reasions) Needer-reasions prints in the wetland (needer-reasions) Needer-reasions plants (> 6 in high) > ½, area of the wetland Herbaceous plants (> 6 in high) + ½, area of the wetland Herbaceous plants (> 6 in high) + ½, area of the wetland Herbaceous plants (> 6 in high) + ½, area of the wetland Herbaceous plants (> 6 in high) + ½, area of the wetland Herbaceous plants (> 6 in high) + ½, area of the wetland Herbaceous plants (> 6 in high) + ½, area of the wetland Herbaceous plants (> 6 in high) + ½, area of the wetland Herbaceous plants (> 6 in high) + 10 in high) + 10 in high) Herbaceous plants (> 6 in high) + 10 in high) + 10 in high) Herbaceous plants (> 6 in high) + 1
Deprezedons cover 7% area of wetland points a point a point a point a point a point a point a point a point a point a point a port a person that cover 4% area of wetland point a poin
Depressions present but cover < ¼ area of wetland beings with 390% cover at person height, not Cowardin classes points a point a p
No despressions prosent The control of prosent processions and the working of the working of the working (areas with >50% cover at person height, not Cowardin classes) Trees or shrubes > ½, area of the welland from the working the w
Structure of plants in the wetshall (arcas with >90% cover at person height, not Cowardin classes) frose or shabes 2 ¹ / ₂ area of the wetshall crose or shabes 2 ¹ / ₂ area of the wetshall derbaceous plants (> 6 in high) > ½ area of the wetshall derbaceous plants (> 6 in high) > ½ area of the wetshall derbaceous plants (> 6 in high) > ½, area of the wetshall derbaceous plants (> 6 in high) > ½, area of the wetshall derebaceous plants (> 6 in high) > ½, area of the wetshall derebaceous plants (> 6 in high) > ½, area of the wetshall derebaceous plants (> 6 in high) > ½, area of the wetshall derebaceous plants (> 6 in high) > ½, area of the wetshall derebaceous plants (> 6 in high) > ½, area of the wetshall derbaceous plants (> 6 in high) > ½, area of the wetshall high of solds area? (* * * * * * * * * * * * * * * * * * *
Trees or shortbe > ½, area of the wetland Here are shoutbe > ½, area of the wetland Here area of the wetland Here area of the wetland Heresceus plants (> 6 in high) > ½, area of the wetland Heresceus plants (> 6 in high) > ½, area of the wetland Heresceus plants (> 6 in high) > ½, area of the wetland Heresceus plants (> 6 in high) > ½, area of the wetland Points = point
Trees or shukes > ½, area of the wetland retraceous plants (5 in Meth) > ½, area of the wetland retraceous plants (5 in Meth) > ½, area of the wetland retraceous plants (5 in Meth) > ½, area of the wetland ress, shrubs, and ungrazed herbacoous < ½, area of the wetland or R. Add the points in the boxes above of She Potential If score is:
Herbaceous plants (> 6 in high) > %, area of the wetland Herbaceous plants (> 6 in high) > %, area of the wetland Frees, shruts, and ungers = Add the points in the boxes above of Site Potential if score is:
Herbaceous plants > 6 in leigh > ½, area of the wetland points =
Trees, shutbs, and ungrated herbacous < ½, area of the wetland of Site Potential if score is: 12.16 = H 6-11 = M 05 Site Potential if score is: 12.16 = H 6-11 = M 05 Site Potential if score is: 12.16 = H 6-11 = M 05 Site Potential if score is: 12.16 = H 6-12 = M 12.16 = H
of Site Potential If score is: 12-16 = H 6-11 = M 05 = 1 Record the rething Costs the landscape have the potential to support the officer quality function of the site? Does the landscape have the potential to support the officer quality function of the site? Yes = 2 No = No = 1 No = No = 1 No = No = 1 No =
of Site Potential If score is:12.16 = H6-11 = M0.5 = J/ Does the landscape have the potential to support the Market quality function of the site? The world within an incorporated city or within ityofox of the site of the same of the site of the same of the second of the site of the same of the second of the se
2 1 2 2
Yes = 2 Yes = 1 Yes = 1
Yes = 1
Does at least 10% of the contribution basin contain filled fields, partures, or forests that have been clearcut
R 2.4. is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? Yes = 1 No = 0
r sources of pollypants coming into the wetland that are not listed in questions F
Other sources Yes # 1 No # 0
Total for R 2
Rating of Landscape Potential if score is: 3-6 = H 1 or 2 = M 0 = L Record the rating on the first page
R 3.0. is the water quality improvement provided by the site valuable to socioty?
R.3.1. Is the wetland along a stream or river that Is on the 303(d) list or on a tributary that drains to one within 1 mi?
Yesal Nou0
R.3.2. Is the wetland along a stream or river that has TMDL limits for nutrients, toxics, or pathogons? Yos = 1. No = 0
R.3.3 Has the site been identified in a watershed or local plan as important for maintaining water quality? {answer / YES if there is a TAVIDL for the drainage in which the unit is faund]
Total for R.3

Wetland name or number

RIVERINE AND FRESHWATER TIDAL FRINGE WETLANDS Hydrologic Functions - Indicators that site functions to reduce flooding and stream erosion	
R 4.0. Does the site have the potential to reduce flooding and erosion?	
R.4.1. Characteristics of the overbank storage the wetland provides:	
Estimate the everage width of the wetland perpendicular to the direction of the flow and the width of the extrangence channel distance between brokes. Calculate the enter Concerns width at wetland (Inverse).	
security interchanter panks).	
If the ratio is more than 20 points = 9	
If the ratio is 5-<10	
If the ratio is 1-45	
If the ratio is < 1 points = 1	
R.4.2. Characteristics of plants that slow down water velocities during floods. Treat large woody debris as forest or sirulb, loope the political appropriate that the best description (polygons need to have 590% cover at person before the transfer of the property of the person before the preson and the person before the person of the pe	
Forest or should for > 1 \text{ Agreed both Conservation of the conservation of	
G	
Add the points in the bo	
Rating of Site Potential If score is: 1246 # H _ 6-11 # M _ 0-5 # L Record the roting on the first page	first page
8 5.0. Does the landscape have the potential to support the hydrologic functions of the site?	
R.5.1. Is the stream or river adjacent to the wetland downout? Yes ■ 0 No ■ 1	
R 5.2. Doos the up-gradient watershed include a UGA or incorporated area?	
R 5.3. is the up-gradient stream or river controlled by dams?	
Total/for R.5 Add the points in the boxes above	
Rating of Landscape Potential if score is: 3 * H1 or 2 = M0 = L Record the rating on the first page	first page
R 6.0. Are the hydrologic functions provided by the site valuable to society?	
R.G.I. Distance to the nearest areas downstroam that have flooding problems? Ghosse the description that bast fits the site.	
The sub-basin immediately down-gradient of the wetland has thooding problems that result in damage to human or natural resources (e.g., houses or salmon redds)	
gradient	
R.E.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? Yes = 2 No = 0	
Yatal for R 6	
Rating of Value f score is; 2-4×H 1= M 0=L	first page

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^

t community: indicators are Cowardin classes and strate with issess in the wetland. Up to 10 pathers may be combined for han 10% of the unit if it is smaller than 2.5 on. Add the numbe
Aginote road Aginote road Aginote to the control points at the control points at the control points at the control points at the control points at the control points at the control points at the control points at the control control points at the control control points at the control points at the control points at the control points at the control points and control points are control points at the control points and control points are control points at the control points and control points are control points and control points are control points and control points are control points and control points are control points and control points are control points and control points are control points and control points are control points and control points are control points and control points are control points and control points are contro
Check the oppeare of water regimes (hydroperiods) present within the wetband. The water regime has to cover more than 10% of the wetband or % act to count (see text for descriptions of hydroperiods). Bermanently flooded or inundated Cosasonally flooded or inundated Socasonally flooded or inundated Socasonally flooded or inundated Secasonally flooding stream or rivor in, or adjacent to, the wetland Secasonally flowing stream or rivor in, or adjacent to, the wetland Secasonally flowing stream in, or adjacent to, the wetland Streamstand and Stream in, or adjacent to, the wetland Streamstand and Streamstand Stream in, or adjacent to, the wetland Streamstand and Streamstand St
H.1.3. (Rethrest of plant species Count the number of plant species in the wetland that cover at least 10 ft? Different patches of the some species can be combined to meet the size threshold and you do not have to name the species. Do not halvde Eurasian milyoil, reed canarygrass, purple loosestrife, Canadian thistie If you counted: > 15 species 5 - 15 species C Species Opinite = 0
H 14. Intersperation of habitats Deduct from the diagrams below whether intersperation among Cowardin plants classes (described in H 1.1), or the classes and unsegestated areas (can include open water or muditat) is high, moderate, low, or none. If you have four or more plant classes or three classes and open water, the rating is always high. None of paints Low = 1 point Moderate = 2 points In this row are High = 3 points

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Wetland name or number
H.1.5. Special habitat features:
Creek the habitat features that are

Cheak the habitat features that are present in the wetland. The number of checks is the number of points. Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long). Standing snaps (dbh > 4 in) within the wetland	
Undersult banks are present for at least 6.6 ft [2 m] and/or overhanging plants extends at least 3.3 ft (1 m) over a stream (or of titch) in, or contiguous with the wedland, for at least 33 ft (10 m). Stable stoop banks of the marbeid that might be used by beaver or muskent for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered</i>	N
wince wood is expected. At least X as of thin-stermed perdiatent plants or woody branches are present in areas that are formanently or seasonally inundated (structures for egg-loying by amphibians) — Invalvable plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strate)	
Total for H 1	I
Rating of Site Potential If score is: 15-18 * H 7-14 * M - 6-6 * L Record the rating on the first page	e first pag
H 2.0. Does the landscape have the potential to support the habitat functions of the site?	
H 2 1. Accessible habitat (Include only hobitat that directly obuts wedond unit), L.C.C. W. = 6 % Colculotte. % unitarity had babitat + 1(% moderate and low intensity land uses)/2] = 6 % front unitarity to the control to the control unitarity to the control to the control unitarity to the contro	
voga.	-
20-5558 of 1 km Polygon 10-19% of 1 km Polygon	
H.2.2. Undisturbed habitat in 1 km Polygon around the wetland. Calculate: % undisturbed habitat + 10% moderate and low intensity land received.	}
soluts >	
Undixtrood habitat 10-50% and in 1-3 patches Undixtrobed habitat 10-50% and > 3 patches	
uożki	
<i>(</i> ,)	6
5.0% of 1 km Polygon is right intensity land uso 5.0% of 1 km Polygon is right intensity and 1.20% of 1 km Polygon is right intensity	1
Add the points in the bo	
ndscape Potential If scoro is: 4-6 # H L-3 = M L <1 = L	first page
H 3.0. Is the habitat provided by the site valuable to society?	
H 3.1. Does the site provide habitat for species valued in laws, regulations, or polities? Choose only the highest score	
that applies to the wetland being rated. Starmeets ANY of the following criteria:	
thin 100 m (see next page)	
the provides habitation Threatened or Endangered species (any plant or animal on the state or foderal lists)	C
it is a Webprad of High Consorvation Value as determined by the Department of Natural Resources the bear from the Consorvation Value as determined by the Department of Natural Resources	1
The was deen categorized as an important habitat site in a local of regional comprehensive plan, in a Shoreline Master Plan, or in a watershed plan	
Site has 1 or 2 priority habitats (listed on next page) within 100 m	
Vorthe o	
Record	e first pag
Wotland Rating System for Western WA: 2014 Update 14 Rither Form = Fifortion Imman 1 2015	
g rorm - Enective January 1, 2015	

WDFW Priority Habitats

Priority, habitats listed by WDEW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife, 2008. Priority Habitat and Species List. Oympia, Washington, 137 pp. http://wdfw.wa.cov/publications/00165/wdfw00165.pdf or access the list from here: http://wdfw.wa.cov/conservation/phs/list/).

Count how many of the following priority habitats are within 330 ft (100 m) of the wedand unit. NOTE: This question is independent of the land use between the wedland unit and the priority habitat.

- Aspen Stands: Pure or mixed stands of aspon greater than 1 ac [0.4 ha].
- Biodiversity Areas and Corridors: Areas of habitat that are relatively important to various species of native fish and
 wildlife (full descriptions in WDFW PHS report).
- Herbaccous Raids: Variable size patches of grass and forbs on shallow soils over bodrock.
- Old-growth/Mature forests: Qld-growth west of Gascade creat Sends of at least 2 troe species, forming a multilayered campay with occasional small openings; with at least 8 trees/se (20 trees/ha) > 23 in (81 cm) dh) or > 200
 years of ago, Mature Garsta, Sends with average diameters exceeding 21 in (53 cm) dhy; crown covor may be less
 than 100% decay, decadence, numbers of stags, and quantity of large downed material is generally less than that
 found in old-growth; 80-200 years old west of the Cascade crest.
- Oregon White Oak: Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak / component is important (luil descriptions in WDFW PHS report p. 158 see web link above).
- Riparian: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence cach other.
- Westslde Prairies: Herbaccous, non-forestod plant communities that can either take the form of a dry prairie or a wet
 prairie (full descriptions in WDFW PHS report p. 161 see web link above).
- Instream: The combination of physical, biological, and chemical processes and conditions that interact to provide
 functional life history requirements for instream fish and wildlife resources.
- Nearshore: Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and
 Puget Sound Nearshore, [uil descriptions of habitats and the definition of relatively undisturbed are in VIDFW report
 see web link on previous page).
- Gaves: A naturally occurring eavily, recess, void, or system of intorconnected passages under the earth in soils, rock,
 i.e., or other geological formations and is large enough to contain a human.
- Cliffs: Greater than 25 ft (7.6 m) high and occurring bolow 5000 ft elevation.
- - Snags and Logs: Trees are considered snags if they are doad or dying and exhibit sufficient docay characteristics to
 enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 20 in (\$1 cm) in western
 Washington and are > 6.5 if (2 m) in height. Priority logs are > 12 in (\$30 cm) in diameter at the largest end, and > 20 it
 (6 m) long.

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed

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Wetland name or number

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

SC 1.0. Estuarino wothlands SC 1.0. Estuarino wothlands Does the wetland meet the following criteria for Estuarino wetlands? — The dominant water regime is tidal, — Vegetatoed, and — With a salinity prester than 0.5 ppt SC 1.1. Es the wetland within a National Wildlife Refuge, National Park, National Estarify Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific Reserve, State Park or Educational Park, Order designated under WAC 332-30-5513	
Does the wetland meet the following criteria for Extuarino wetlands? — The dominant water regime is tidal, — Vegetated, and — With a salanity greater than 0.5 ppt SC.1.1. is the wetland within a National Wildlife Refuge, National Park, National Extend Reserve, Natural Area Preserve, State Park of Educational, Environmental, or Scientific Reserve designated under WAC 332-30	
— The dominant water regime is tidal, — Vegetsked, and — With a salinity greater than 0.5 ppt — Yes —Go to SC 1.1 (NoyNot an astuarine wet SC 1.1. is the wetland within a National Wildlife Refuge, National Park, National Exbary Reserve, Natural Area Preserve, State Park of Educational, Environmental, or Scientife Reserve dosgraved under WAC 332-30	
— Vegetated, and — With a salinity greater than 0.5 ppt Yes — Go to 5C.1.1 (Noylvot an astuarine wet SC.1.1. Extre wetland within a National Wildlife Refuge, National Park, National Externy Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30	
—— With a salinity greater than 0.5 ppt. SC.1.1. Et the wetland within a Nationary Widelferinge, National park, National Extra PyReserve, Natural Area Preserve, State Park of Educational, Environmental, or Scientific Reserve designated under WAC 332-30.	
SC 1.1. is the wetland within a National Wildlife Refuge, National Park, National Echary/Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30	PE PE
Yes a Category 1 No - Go to SC 1.2	51? Cat.1
SCL2. Is the wetland unit at least 1 ac in size and moots at least two of the following three conditions?	
 The wetland is relatively undisturbed (has no diking, ditching, filling, cuitivation, grazing, and has less than 10% cover of non-pative plant energie. (if non-pative species are Sorting, see page 25) 	ğ
—At least X of the landward edge of the wetland has a 100 ft buffor of shrub, forost, or un-grazed or un-	
mowed grassland. The complexed has as became true afters following forthwese sides because decreased and with a man sumbar and	= 5
— the wednest this actional two of the following foculates, againsts, copiessions will open water, or configuous freshwater wetlands. Yes = Catagory I No = Catagory II	. #.
SC 2.0. Wetlands of High Conservation Value (WHCV)	
d their website to include the list of \	
Conservation Value?	2.3 Cat.
SC2.2. Is the wetland listed on the WDNR database as a Wotland of High Conservation Value?	
	 }
Yes - Contact WNHP/WDNR and go to SC2.4 No a Not a WHCV	Ş
ntified the wetland within the S/T/R as a Wetland of High Consorvation Value	e Ç
their websiter No # NOT a WHLV	Ž.
SC 3.0. Bogs	-
boos the wetiand jot any part of the unit, meet both the criteria for soils and vegetation in bogs. Use the key below. If you answer YES you will still need to rate the wetland based on its functions.	. wey
SC3.1. Does an area within the wetland unit have organic soil horizons, oither peats or mucks, that compose 16 in or	ı or
more of the first 32 in of the soil profile? Yes Go to SC 3.3 No Go to SC 3.2	3.2
SC3.2. Does an area within the wotland unit have organic solls, either peats or mucks, that are less than 16 in deep	db
drock, or an impermeable hardpan such as clay or volcanic ash, or that are floating	zo or
pond? Yes - Go to SC 3.3 No = 1s not a bog	Soq
more than 70% cover of mosses at ground level, A	-86
cover of plant species listed in Table 4? NOTE: (Succession and unspecies listed in Table 4?)	4 1
measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the	the
plant species in Table 4 are present, the wedand is a bog.	- 8
SC3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, western red cedar,	
western hemiock, lodgepole pine, quakling aspen, Engelmann spruce, or western white pine, AND any of the	the
species (or combination of species) listed in Table 4 provide more than 30% of the cover under the canopy?	14.5

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Wetland name or number

SC 4.0. Forested Wetlands

Does the wetland have at least 1 continuous agg of forest that meets one of these enteria for the WA Department of Hish and Wildlife's forests as priority habitate? If you answer YES you will still need to rate the westlond based on its function to the westlond based on its function that have been a based on its function of Cacado creat); Stands of at least two tree species, forming a multi-layered canapy with occasional small openings, with at least 8 trees/ac/20 (20 trees/ha) that are at least 200 years of ago OR have a diameter at breast height (blah 0) 22 in (§2 cm) or more.

— Mature forests (west of the Cacado Creat); Stands where the largest trees are 80-200 years old OR the species that make up the canopy have an average diameter (glah) exceeding 21 in (§3 cm).

Ç Yes # Catagory | No PNot a forested westand for this section

— The wedand lies in a depression adjacent to marino waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks SCS.0. Wetlands in Coastal Lagoons

Does the wetland moet all of the following critoria of a wetland in a coastal lagoon?

. 3 during most of the year in at loast a portion of the lagoon (notofyth 20 most order the bottom) Yes – Go to SC 5.1 (No $\frac{1}{2}$ 0 No $\frac{1}$ — The lagoon in which the wetland is located contains ponded water that is saline or brackish (> 0.5 ppt)

 — The wetland is relatively undistruibed (has no disling, ditching, filling, cultivation, grazing), and has less
than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100).
 — At least X of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-SC 5.1. Does the wotland meet all of the following three conditions?

<u>=</u>

Yes * Category 1 No * Category II --- The wetland is larger than 1/10 ac (4350 ft²) SC 6.0. Interdunal Wetlands

ĕ is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? If you answer yes you will still need to rate the wetland based on its habbat functions.
In practical terms that mens the following geographic areas:
In product terms that mens the following geographic areas:
In prof Boach Perlinals Lands worst of SR 103

— Grayland-Westport Lands worst of SR 105

St. — Ocean Shores-Copalis; Lands west of SR 11S and SR 109

Yes – Go to SC 6.1 (No not an Interdunal wedand for rating

SC 6.1. Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H,H,H or H,H,M for the three aspects of function)?

Yes = Catagory! No - Go to SC 6.2. SC 6.2. Is the wetland 1 ac or larger? or is it in a mosale of wetlands that is 1 ac or larger? No - Go to SC 6.3 Yes a Catagory II No SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a morale of wetlands that is between 0.1 and 1 ac?

No = Category IV Yes = Category III Category of wetland based on Special Characteristics If you answered No for all types, enter "Not Applicable" on Summary Form

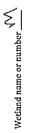
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RATING SUMMARY – Western Washington

77	2012	z
Date of site visit:	L. Hunger Trained by Ecology? Yes No Date of training 2	e HGM classes? Y
	ained by Ecology? Yes	Wetland has multiple HGM classes?
[WALK	- HWS677	dep
Name of wetland (or ID#): 1 Nod = Now Control of No	Rated by K. W. L.	HGM Class used for rating

NOTE: Form is not complete without the figures requested (figures can be combined). Source of base aerial photo/map

OVERALL WETLAND CATEGORY (based on functions or special characteristics)

1. Category of wetland based on FUNCTIONS Category I – Total score = 23 - 27

Category II – Total score = 20 - 22 Category III – Total score = 16 - 19 _Category IV — Total score = 9 - 15

Score for each function based on three rathings (order of rathings is not important)

	Water Quality	Hyarologic	Habitat	
	Ç	Circle, the appropriate r	propriate ratings	
Site Potential	∓ (<u>@</u>)⊤	Ч́(м) н	① × H	
Landscape Potential	H M	(1) M H	(1) M H	
Value	H) M L	_ <u>></u>)	(£) ⊠	TOTAL
Score Based on Ratings	S	S	Ŋ	٥

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY	3
Estuarine	п і	
Wedand of High Conservation Value	I	
30g	I	
Mature Forest	I	
Old Growth Forest	I	
Coastal Lagoon	I I	1
interdunal	и шл	ľV
None of the above	\	
		ŀ

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Wetland name or number ___

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

	The second secon
Wisp of:	To answer questions: Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4
Hydroporlods	D1.4, H1.2
Location of outlet (can be added to map of hydroperiods)	01.1,04.1
Boundary of area within 150 ft of the wetland (can be added to another figure) D 2.2, D 5.2	D 2.2, D 5.2
Map of the contributing basin	043,053
I km Polygon: Area that extends I km from entire wetland odge - including	H21, H22, H23
polygons for accessible habitat and undisturbed habitat	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D3.1, D3.2
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D3.3

Riverine Wetlands

Map of:	To answer questions: Figure #	Figure #
Cowardin plant classes	H1.1, H1.4	
Hydroperiods	H1,2	
Ponded dopressions	R1.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	R24	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (can be added to another figure)	R4,1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2,1, H 2,2, H 2,3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R3.1	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	R3.2, R3.3	

Lake Fringe Wetlands

98 H,H,H 88 H,H,M 78 H,H,L 78 H,H,L 68 H,M,L 68 H,M,L 58 H,L,L 48 M,L,L 38 L,L,L 38 L,L,L

Map of:	To answer questions: Figure #	#
Cowardin plant classes	L11, L41, H11, H14	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wotland (can be added to another /jgure) 1.2.2	1.2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2,1, H 2,2, H 2,3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website) L3.1, L3.2	L3.1, L3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L3.3	

Signature Avertaines		
Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	Н1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	\$1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants	\$4.1	
(can be added to figure above)		:
Boundary of 150 ft buffer (can be added to another figure)	\$21,55,1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	53.1, 53.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	53.3	



HGM Classification of Wetlands in Western Washington

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in For questions 1-7, the criteria described must apply to the entire unit being rated. questions 1-7 apply, and go to Question 8.

Are the water levels in the entire unit usually controlled by tides except during floods?

NO Fgo to 2

YES - the wetland class is Tidal Fringe - go to 1.1

1.1 is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

NO - Saltwater Tidal Fringe (Estuarine)

If your wetland can be classified as a Freshwater Tidal Fringe use the forms for Riverine wetlands. If it is Salawater Tidal Fringe It is an Estuarine wetland and is not scored. This method cannot be used to YES - Freshwater Tidal Fringe score functions for estuarine wetlands. The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit.

NÝ-go to 3

YES - The wetland class is Flats Ayour wetland can be classified as a Flats wetland, use the form for Depressional wetlands.

3. Does the entire wetland unit meet all of the following criteria?

.....The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size;

At least 30% of the open water area is deeper than 6.6 ft (2 m).

VES - The wetland class is Lake Fringe (Lacustrine Fringe) NO - go to 4

4. Does the entire wetland unit meet all of the following criteria?

The wetland is on a slope (slope can be very gradual),

The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetlow, or in a swale without distinct banks,

The water leaves the wetland without being impounded.

NQ - go to 5

YES - The wetland class is Slope

shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft NOTE: Surface water does not pond in these type of wedands except occasionally in very small and

5. Does the entire wetland unit meet all of the following criteria?

The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,

___The overbank flooding occurs at least once every 2 years.

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NO 2 go to 6 NOTE: The Riverine unit can contain depressions that are filled with water when the river is not

surface, at some time during the year? This means that any outlet, if present, is higher than the interior 6. Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the

NO - go to 7

YES -/The wetland class is Depressional

maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural Is the entire wetland unit located in a very flat area with no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be

NO - go to 8

YES - The wetland class is Depressional

classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wedand has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the Your wetland unit seems to be difficult to classify and probably contains several different HGM wetland unit being scored.

NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wedand unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit, classify the wedand using the class that represents more than 90% of the total area.

HGM classes within the wetland unit	HGM class to
Deing Fated	use in rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake Fringe	Lake Fringe
Depressional + Riverine along stream	Depressional
within boundary of depression	•
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other	Treat as
class of freshwater wetland	ESTUARINE

lf you are still unable to determine which of the above critaria apply to your watland, or if you have more than 2 HGM classes within a watland boundary, classify the wetland as Depressional for the

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M 0 Wetland has an unconstricted, or slightly constricted, surrace courte, to be permanorally flowing clitch. points = 1 Wetland Is a first depression (QUESTION 7 on key), whose outlet is a permanorally flowing clitch. D 1.2. The soil 2.1 has below that the standard for duff layed is true clay or true organic (use NRCS definitions)/Nos = 4. Noc*O > D 1.3. Characteristics and distribution to persistent signs: [Energent, Scrub-shrub, and/or Forested Cowardin dasses]; Wetland has persistent, unpraced, points > 95% of srea points = 4 Wetland has an intermittentity flowing stream or ditch, OR highly constricted permanently flowing outlets. To points = 2. Wetland has an unconstricted, or alightly constricted, surface outlet that is permanently flowing points = 1. points = 1 points = 0 Water Quality Functions - Indicators that the site functions to improve water quality Add the points in the baxes above D 1.1. Chanadaristics of surface weter outflows from the worland: Werdand Is a depression or flat doprossion (QUESTION 7 on key) with no surface water leaving it (no outled). DEPRESSIONAL AND FLATS WETLANDS D 1.4. Charatevistics of sovsenal ponding of inundation: This is the area that is ponded for at least 2 months. See description in manual. Area seasonally ponded is > X total area of wetland D 1.0. Does the site have the potential to improve water quality? Wetland has persistent, ungrazed plants > 1/10 of area Wetland has persistent, ungrazed plants $<^1/_{10}$ of area Area seasonally ponded is > % total area of wetland Area seasonally ponded is < 1⁄2 total area of wetland

Rating of Site Potential If score is: 12.16 * H 6-11 * M 0-5 * L Record the rating on the first page

D 2.0. Does the landscape have the potential to support the water quality function of the site?	site?	2000
D 2.1. Does the wetland unit receive stormwater discharges?	Yosma Nowo	0
D 2.2. is > 10% of the area within 150 ft of the wetland in land uses that generate poliutants?	Yes wil No 60	থ
D 2.3. Are there septic systems within 250 ft of the wetland?	Yes=1 Now(0)	Ç
D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1-D 2.37 Source	8 D 2.1-D 2.37 Yes = 1 No =(0)	৩
Total for D 2 Add Khe points	Add the points in the boxes above	Ó

Rating of Landscape Potential If score is: 3 or 4 * H 1 or 2 = M 7 0 = L Record the rating on the first page

D 3.0. Is the water quality improvement provided by the site valuable to society?	25055
D3.1. Does the wedand dischargo directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list?	0
D 3.2. is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list? Yes ● 3 No = 0	
D 3.3. Has the site boson identified in a watershed or local plan as important for maintaining water quality (answer YES if there is a TMDL for the basin in which the unit is found)?	4
Total for D 3	()

Rating of Value If score is: Z-4 = H 1 = M 0 = L Record the rating on the first page

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S

Wetland name or number

DEPRESSIONAL AND FLATS WETLANDS

Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation	Gdation
D 4.0. Does the site have the potential to reduce flooding and erosion?	
D 4.1. Characteristics of surface water outflows from the wetland:	_
Wedland is a depression or flat depression with no surface water leaving it (no outlet) points = 4	4 t
Wotland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outletpoints (a. 2)	なることの
Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch points * 1	
yvertime has an uncorburetes, or signay constructed, surface outlet that is permanently flowing points = 0	0
D 4.2. Depth of Stolags duling wet periods, Estimate the height of pending above the bottom of the outlet. For wedends	spuc
with no outlet, measure from the surface of permanent water or if dry, the despest part.	
Marks of pending are 3 ft or more above the surface or bottom of autlet points # 7	
Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet points = 5	
Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet	<
The wetland is a "headwater" wetland)
ns on the surface that trap water	_
Marks of panding loss than 0.5 ft (6 in)	_
D 4.3. Contribution of the wetland to storage in the watershed: Estimate the ratio of the area of upstream basin	
contributing surface water to the wetland to the area of the wetland unit itself.	_
The area of the basin is loss than 10 times the area of the unit	\/ _
100 times the area of the unit	
Entire wetland is in the Flats class	
Total for D 4 Add the points in the boxes above	ſţ
Rating of Site Potential If score is: 12.16 = H V 6-11 = M 0.5 = L Record the rating on the flist page	on the first page
D 5.0. Does the landscape have the potential to support hydrologic functions of the site?	200000000
D S.1. Does the wetland receive stormwater discharges?	0
D.5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? Yes # 1 No £ 0/	0
DS.3. is more than 25% of the contributing basin of the wetiand covered with intensive human land uses (residential at >1 residente/5c, urban, commercial, serticulture, etc.)?	O E
Add the points in the	[c
Rating of Landscape Potential	on the first page
D 6.0. Are the hydrologic functions provided by the site valuable to society?	274242444
D 6.1. The unit is in a landscape that has flooding problems. Choose the description that best matches conditions around	pun
the wetland unit being rated. Do not add points, <u>Chaose the highest score if more than one condition is met</u>	
The worldens contract contract the party with a state of the party of	_

D 6.0. Are the hydrologic functions provided by the site valuable to society?

D 6.1. The unit is in a landscass that has flooding to provided by the site valuable to society?

The unit is in a landscass that has flooding to society that has flooding stored. On not adoptive, choose the excription that bear methre conditions around the wetland unit bear methre sould stored by the society of the size of the society of the so

Rating of Value if score is: 2-4 = H Z 1 = M 0 = L

Record the rating on the first page

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RIVERINE AND FRESHWATER TIDAL FRINGE WETLANDS	
Water Quality Functions - Indicators that the site functions to improve water quality	
R 1.0. Does the site have the potential to improve water quality?	
R.1.1. Area of surface depressions within the Riverine wetland that can trap sediments during a flooding event:	
Depressions cover > 1/2 area of wetland	
Depressions present but cover < % area of wetland	_
No depressions present	_
with >90% cover at person height, not Cowardin classos)	_
Trees or shrubs > 2/3 area of the wetland	
Trees or shrubs > 1/2 area of the wetland	
Herbaceous plants (> 6 in high) > ² / ₂ area of the wetland	
\	
shrubs, and ungrazed herbac	Т
Add the points in the boxes above	٦
Rating of Sike Potontial If score Is; 12-16 = H6-11 = M0-5 = I, Record the rating on the first page	ţ,
R 2.0. Does the landscape have the potential to support the water quality function of the site?	
R 2.1. Is the wedand within an incorporated city or within its UGA?	
R 2.2. Does the contributing basin to the wettand include a UGA or ipcorporated area? Yes = 1. No = 0	
R 2.3. Does at least 10% of the contributing basin contain tilled fields, partures, or forests that have been clearent within the last 5 years? You = 1 No = 0	
R 2.4. is > 10% of the area within 150 ft of the wetland in Jand uses that generate poliutants? Yes # 1 No # 0	
R 2.5. Are there other sources of pollurants coming jobs the wetland that are not listed in questions R 2.1-R 2.4 Other sources $\frac{1}{1000}$ Yes = 1 No = 0	
Total for R.2 Add the points in the boxes above	Г
Rating of Landscape Potential if score is 3-6 = H 1 or 2 = M 0 = L Record the roting on the first page	9
R 3.0. is the water quality improvement provided by the site valuable to society?	Г
R 3.1. Is the wordand along a stykam or river that is on the 303(d) list or on a tributary that drains to one within 1 mi?	
Yosal Nobo	
R 3.2. Is the wetland along a stream or river that has TMDL limits for nutrients, toxics, or pathogens?	
Yes all No ≈ O	П
R.3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? (answer YES if there is a $7MOL$ for the drainage in which the unit is found)	
Total for R3 Add the points in the boxes above	
Rating of Value If score is: 2-4 = H1 = MO = L	ţ

Wetland name or number

RIVERINE AND FRESHWATER TIDAL FRINGE WETLANDS

Hydrologic Functions - Indicators that site functions to reduce flooding and stream erosion	
R 4.0. Does the site have the potential to reduce flooding and erosion?	
8 4.1. Characteristics of the overbank storage the wetland provides:	
Estimate the avarage width of the wetland perpendicular to the direction of the flow and the width of the	
stream or river channel (distance between banks). Calculate the ratio: (average width of wetland)/(average width of stream between banks).	
if the ratio is more than 20	
If the ratio is 1—5	
If the ratio is < 1	
R 4.2. Characteristics of plants that slow down water velocities during floods: Treat large woody debris as forest or	
shrub. Choose the points appropriate for the best description (polygons need to have >90% cover at person height. These are NOT Cowardin choses).	
Forest or shrub for >1, area OR emergent plants > 3, area	
\	
\	
Total for R4 Add the points in the boxer above	Γ
Rating of Site Potential if score s:12-16 = H6-12E M0.5 = L Record the rating on the first page	sode
R 5.0. Does the landscape have the potential to support the hydrologic functions of the site?	
R 5.1. Is the stream or river adjacent to the wetland downcut?	
R S.2. Doos the up-gradient watershed include a UGA or incorporated area?	
R 5.3. is the up-gradient stream or river controlled by dams?	
Total for R 5 / Add the points in the boxes above	
Rating of Landscape Potential If score is: $3 = H = 1 \text{ or } 2 = M = 0 = L$ Record the rating on the first page	эйод
R 6.0. Are the hydrologic functions provided by the site valuable to society?	
R 6.1. Distance to the nearest areas downstream that have flooding problems?	
Chaose the description that bast fits the site. The orbitalis immediately decumentation of the unaimed the chaotien enothers that result in demonstra	
human or natural resources (e.g., houses or salmon redds) points = 2	
gradient	
No flooding problems anywhere downstream	

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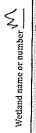
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Record the rating on the first page

R.6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? $V_{\rm SS} = 2 \quad N_{\rm D} = 0$ Total for R.6 Add the points in the boxes above

Rating of Value if score is: 2-4 = H 1 = M 0 = L

Total for R 6



	rested closs. Check the st to meet the threshold turns a bracked. res or mere: points = 4 3 structures; points = 2 2 structures; points = 0 1 structures; points = 0 moss/ground-cover)	water regime has to cover vioas, work to the persont; points = 3 3 types present; points = 2 2 types present points = 0 1 type present points = 0 2 points 2 points	histic to name points = 2 points = 1	or nano. If you points
These questions apply to wetlands of all HGM classes: HABITAT FUNCTIONS - Indicators that site functions to provide important habitat. H 1.0. Does the site have the potential to provide habitat?	asses and strata within the Formary be combined for each clost. Sac. Add the number of structu. A structu. A structus, thrubs, herbacoous,	tand. The w of hydropes 4 or more	Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft?. Different particles of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurosian miljoli, reed concrygrass, purple loosestife, Canadian thistie if you counted: > 19 species 5-19 species 5-19 species 5-25 species Points = 1	Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H.1.1), or the classes and unvegetated areas (can include open water or mudfact) is high, moderate, low, or none. If you have four or more plant classes ar three classes and open water; the retiring is always high. Low = 1 point Moderate = 2 points or ow H = 3 points
These questions apply to HABITAT FUNCTIONS - Indicators that site functions H.O. Does the site have the potential to provide habitat?	H 1.1. Structure of plant community; indicators are Cowardin al Cowardin al Cowardin plant alasses in the wethand. Up to 10 partners of X ac or more bon 10% of the unit if it is smaller than 1 Aquastic bed Aquastic bed Aquastic bed Aquastic bed Aquastic bed Aquastic bed Foresteed areas where circuits have > 30% cover) Foresteed (areas where trees have > 30% cover) if the unit has a forested class, shock if; The Foresteed class has 3 out of 5 strats (canopy, sub that each cover 20% within the of research colonys and that each cover 20% within the of research colonys.	H 1.2. Hydroperflods Check the hydroge of water regimes (hydroperflods) present within the wet more than 10% of the wetland or ¼ as to count (see text for descriptions Fermanently flooded or inundated Seasonally flooded or inundated Ofcasionally flooded or inundated Sasonally flowing stream or river in, or adjacent to, the wetland Lake Frings wetland Freshwater tidal wetland	H 1.3. Richnoss of plant species Count the number of plant species in the wetland that cover at least 10 ft? Different partner of the same species can be combined to meet the size thin the species. Do not include Eurosian milital, reed canarygrass, purple loo if you counted: > 19 species 5 - 19 species 6 - 55 species	Nong to points All three diagrams All three diagrams All three diagrams In this row In this

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Wetland name or number

Li Coorta bakantan	
Chock the habitat features that are present in the wetland. The number of checks is the number of points. Large, downed, woody debris within the wetland i> 4 in diameter and 6 it long).	
Stable steep banks of fine material that might be used by boover or muskrat for doming. (> 30 degree slope) OR signs of recent boaver activity are present (out shrubs or trees that have not yet weathered	1
where wood is exposed) At Josef X ac of thin-stremmed consistent plants or mondo beauther were	
permanently or seasonally involved control of seasonal principles of permanently or seasonally involved control of seasonally involved control of seasonal principles of seasonally involved the work of the worker are not of seasonal or the	
strate)	
Total for H 1 Add the points in the boxes above	J
Rading of Site Potential If score is: 15-18 " H 7-14 = M V D-6 = L Record the rading on the first page	he first pag
H 2.0. Does the landscape have the potential to support the habitat functions of the site?	
habitat (include only habitat that	
if total accessible habitat [5]	
> 1/3 (33.3%) of 1 km Polygon	
	مس
A 10% of 1 km Polygon < 10% of 1 km Polygon	
1 km Polyzon around the wetland	Ī
Calculate: % undisturbed habitat + [(% moderate and low intensity land uses)/2] # \$ %	
1	
	مسدر
ykgon	
> 50% of 1 km Polygon is high intensity land uso 550% of 1 km Polygon is high intensity land uso	7
Total for H 2 Add the points in the power place	1
Rating of Landscape Potential If score is: 4-6=H 1-3=M < 1=L Record the rating on the first page	first page
H.3.0. Is the habitat provided by the site valuable to society?	
H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? Choose only the highest score	
that applies to the wedand being rated. Site meets ANY of the following criticals:	
it has 3 or more priority habitats within 100 m (soo next page)	
 It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists) It is managed as a faculton for an including Managered species. 	ľ
it is a Wetland of High Cansarvation Value as determined by the Department of Natural Resources	1
 It has been categorized as an important habitat site in a local or regional comprehensive plan, in a Shoreline Matter Plan, or in a watershed plan 	
Site has 1 or 2 priority habitats (listed on next page) within 100 m	
of the criteria above	
Kaung of Value II score is 127, 2 m H 1 m M 0 m L	e first page
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WDFW Priority Habitats

Priority.habitatis listed by WDEW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in Washington Department of Fish and Wildlife, 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp. http://wdfw.wa.gov/publictions/00165/wdfw.00165.pdf or access the list from here: http://wdfw.wa.gov/conservation.phs./list.)

Count how many of the following priority habitats are within 330 ft (100 m) of the wedand unit. NOTE: This question is independent of the land use between the wetland unit and the priority habitat.

- Aspen Stands: Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- Blodiversity Aroas and Corridors: Aroas of habitat that are relatively important to various species of native fish and
 wildlife (full descriptions in WDFW PHS report).
- Herbaccous Balds: Variable size patches of grass and forbs on shallow soils over bedrock.
- Old-growth/Mature forests: <u>Old-growth west of Classade crost</u> Stands of at least 2 tree species, forming a multilayered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha.) > 23 in (81 cm.) dah or > 200 years of ago. <u>Mature forests</u>. Stands with average dlameters exceeding 2.1 in (53 cm.) dah; crown cover may be least than 1,00%, decay, decadence, numbers of smags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.
- Oregon White Oak: Woodland stands of pure oak or oak/conifor associations where canopy coverags of the oak "component is important (full descriptions in WDFW PHS report p. 158 – see web link above).
 - Riparian: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecceystems which mutaally influence each other.
- Westside Prairies: Herbaccous, non-forested plant communities that can either take the form of a dry prairie or a wet
 frairie (full descriptions in WDFW PHS report p, 161 see web link above).
- Instream: The combination of physical, blological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources.
- Nearshore: Rolativoly undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and
 Puget Sound Nearshore. (full descriptions of habitats and the definition of relatively undisturbed ore in WDFW report
 see web link on previous page).
- Carves: A naturally occurring cavity, rocess, void, or system of interconnocted passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.
- Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.
- Talus: Homogenous areas of rock rubble ranging in avorage size 0.5 6.5 (t. (0.15 2.0 m), composed of bussit, andestte, fand/or sedimentary rock including riprap sildes and mine tailings. May be associated with cliffs.
- V— Snags and Logs: Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 20 in (51 cm.) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm.) in diameter at the largest end, and > 20 ft (6 m) long.

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed

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Wetland name or number

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type Dieck off any cited that apply to the wedond. Cite the category when the appropriate cited are met	Category
SC 1.0. Estuarino wetlands Does the wetland meet the following criteria for Estuarine wetlands? — The dominant water regime is tidal,	
— Vegetated, and — With a salinity greater than 0.5 ppt Yes –Go to SC 1.1 Noy Not an estuarine wotland	
ic Refuge, National Park, National Est vironmental, or Scientific Reserve de Yes =	Cat. I
SC 1.2. Is the workland unit at least 1 as In also and mosts at losat two of the following three conditions? — The workland is relatively undisturbed (has no diking, distring, filling, cultivation, grazing, and has less than 10% cover of non-native plants species. (If non-native species are Specifics, see position, see positions) — At losar, & of the landward edge of the workland has a 100 ft buffer of sirrul, forest, or un-grazed or un-	ī, Š
mowed grassland. — The wettand has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. Yes = (Δt) (Δt) (Δt) (Δt) (Δt)	Qt.
SC 2.0. Wetlands of High Conservation Value (WHCV) SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Washads of High SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Washads of High SC 2.2. Is the wetland when the WDNR database as a Wetland of High Conservation Value? Yes = Category! No = Not a WHCV SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? HIDS/Lownyl diffwh. Section/Township/Range that contains a Natural Heritage wetland? Yes = Contact WNIHP/WDNR and go to SC 2.4 (No) Not a WHCV High Conservation Allowand Lind the wetland within the S/T/R as a Wetland of High Conservation Allowand Lind a WHCV Host wobsites? No = Not a WHCV	Cat. 1
SC 3.0. Bogs Does the wetland (or any part of the unit) moet both the criteria for soils and vegetation in bogs? Use the key Does the wetland sorated on its functions. SC 3.1. Does an area within the wetland unit have organic soil horizons, either peats or mucks, that compose 16 in or more of the first 32 in of the soil profile? SC 3.1. Does an area within the wetland unit have organic soils, either poats or mucks, that are fostland to the organic soils, either poats or mucks, that are less than 16 in deep over bedrock, or an impermeable hardpan such as day or volcanic each, or that are floating on top of a lake or pond and area with poats or mucks have more than 70% cover of moses at ground level, AND at least 3 30% cover of plant species listed in Table 4? NOTE: if you are uncertain about the extent of moses in the understory, you may substitute that criterion by measuring the pile of the water that seeps into a hold edg at least 16 in deep. If the pil is loss than 5.0 and the plant species in Table 4 are present, the workland is a bog. SC 3.4. Is an area with poats or mucks forested (> 30% cover) with Sitka spruce, subspiling fit, western red codar, western homilock, lodgepole pine, quaking appen, Engelmann spruce, or western white pine, AND at least a speed or genedec (or combination of speedes) listed in Table 4 are present, the wetland supply of the over under, however the subsection by years is a Caregory 1 bog No No F 10 octa bog	Cat. 1

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SC 4.0. Forested Wetlands	
Does the wetland have at least 1 conflated accept forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? If you answer YES you will still need to rate the wetland based on its functions. — Off growth forest (west of cascade crest). Stands of at least two tree species, forming a multi-layered canopy with occasional annual openings, with at least two toes (20 trees/ha) that are at least 200 years of age OR have a diameter at breast helght (deh) of 32 in (81 cm) or more.	
—Matura forests (west of the Cascade Crost); Stands where the largest trees are 80-200 years old OR the species that make up the canopy have an average diameter (dah) exceeding 21 in (53 cm). Yos = Category \(\text{Not} \) a forested wetland for this section	Ę.
SC 5.0. Wotbands in Coastal Lagoons Dees the wotland meet all of the following eriteria of a wortland in a coastal lagoon? — The wetland lies in a depression adjacent to marino waters that is wholly or partially exparated from marine waters by sandbands, grovel bands, sthingle, or, itest frequently, rodes	
—The lagoon in which the weetand is located contains ponded water that is saline or bracklah (> 0.5 ppt) during most of the year in at locat a portion of the lagoon (reading Lago measured near the bestrom) Yes – Go to SC 5.1 (* No 4 Not a weetland in a coastal lineon	ŧ
be conditions? To diking, ditching, fill c plant species (see lis and has a 100 ft buff.	S E
— The weetand is larger than ½,0 ac (4350 ft²) Yes = Ortogary! No = Category!	
SC 6.0. Interdunal Wetlands Ethe weet of the 1889 line (also called the Wortern Boundary of Upland Ownership or WBUO)? If you answer yes you will still need to rate the wetland based on its habitat functions. In practical terms that means the following geographic areas: — Long Boach Peninsula: Lands west of SR 103	
— Grayland-Westport: Lands west of SR 105 — Ocean Sheres-Copalis: Lands west of SR 115 and SR 109 Yes — Go to SC 6.1 (No = pot an interdunal wedland for rating	Ę.
SC 6.1. is the weetand 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates HJH, I or HJH, M for HJH, I or HJH, I or HJH, I or HJH, I or HJH, I are 15.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0	St.
SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a mozaic of wedands that is between 0.1 and 1 ac? Yes = Category II No = Category II No = Category III No = Category IV	E 25
Category of wetland based on Special Characteristics If you answered No for all types, onter "Not Applicable" on Summary Form	3

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RATING SUMMARY – Western Washington

Date of site visit. S 4 22 Name of wetland (or ID #): L. Alance Trained by Ecology Per es No Date of training 2015 Wetland has multiple HGM classes? Y HGM Class used for rating

NOTE: Form is not complete without the figures requested (figures can be combined). Source of base aerial photo/map

OVERALL WETLAND CATEGORY Thased on functions or special characteristics

1. Category of wetland based on FUNCTIONS

_Category III - Total score ≈ 16 - 19 Category II ~ Total score = 20 - 22 Category I - Total score = 23 - 27

_Category IV - Total score = 9 - 15

Score for each function based on three ratings (order of ratings is not important)

H,H,H≖8 8≖H,H,M

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarino	II II
Wetland of High Conservation Value	-
Bog	I
Mature Forest	,
Old Growth Forest	_
Coastal Lagoon	1 1
Interdunal	I II III IV
Nane of the above	7

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Wetland name or number __

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

To answer questions: Figure #
_
D14 U12
011011
23.00
7.50
043,053
H21. H22. H23
D3.1. D3.2
03.2

Riverine Wetlands

Mapor	To answer questions:	Figure #
Cowardin plant classes	111 114	
Distribution		
The control of the co	H12	
Ponded depressions	RILI	
Boundary of area within 150 ft of the wetland (can be added to another flaure)	R24	
Plant cover of trees, shrubs, and herbaceous plants	R12 R42	
Width of unit vs. width of stream (can be added to another flaure)	P.4.1	
Map of the contributing basin		
	0.2.2, 0.4.3, N.3.2	
1 Km Polygon: Area that extends 1 km from entire wetland odge - including	H 2.1, H 2,2, H 2,3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R3.1	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	832.833	

Lake Fringe Wetlands Manor

	To answer questions:	Floure #
Cowardin plant classes	L1.1 L4.1 H1.1 H1.4	
Plant cover of trees, shrubs, and herbaceous plants	1.12	
Soundary of area within 150 ft of the wetland (can be added to another figure)	12.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - Including	H21. H22. H2.3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	13.1.13.2	
Scroen capture of list of TMDLs for WRIA in which unit is found (from web)	133	

Slope Wetlands

- Wap of:	4	
	to answer duestions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	51.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants	54.1	
(can be added to figure above)	!	
Boundary of 150 ft buffer (can be added to another fleure)	521 551	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H21 H22 H33	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	\$3.1.53.2	
ı	633	



HGM Classification of Wetlands in Western Washington

2 If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria For questions 1-7, the criteria described must apply to the entire unit being rated questions 1-7 apply, and go to Question 8.

- Are the water levels in the entire unit usually controlled by tides except during floods?
- NO go to 2

YES - the wetland class is Tidal Fringe - go to 1.1

1.1 is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

NO – Saltwater Tidal Fringe (Estuarine)

If your wetland can be classified as a Freshwater Tidal Fringe use the forms for Riverine wetlands. If it is Saltwater Tidal Fringe it is an Estuarine wetland and is not scored. This method cannot be used to YES - Freshwater Tidal Fringe score functions for estuarine wetlands.

The entire wedand unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit. d

YES - The wetland class is Flats fyour wetland can be classified as a Flats wetland, use the form for Depressional wetlands. NO - go to 3

- __The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac. (8 ha) in size; Does the entire wetland unit meet all of the following criteria? m

 - _Atleast 30% of the open water area is deeper than 6.6 ft (2 m).

YES - The wetland class is Lake Fringe (Lacustrine Fringe) NO - go to 4

- Does the entire wetland unit meet all of the following criteria? The wetland is on a slope (slope can be very gradual), 4
- The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks,

 The water leaves the wetland without being impounded.

NO - go to 5

NOTE: Surface water does not pond in these type of wedands except occasionally in very small and shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft

YES - The wetland class is Slope

___The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that Does the entire wetland unit meet all of the following criteria?

stream or river,

The overbank flooding occurs at least once every 2 years.

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NOTE; The Riverine unit can contain depressions that are filled with water when the river is not YES - The wettand class is Riverine NO - go to 6 flooding Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the surface, at some time during the year? This means that any outlet, if present, is higher than the interior of the wetland.

NO - go to 7

YES - The wetland class is Depressional

is the entire wedand unit located in a very flat area with no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural 7.

NO - go to 8

YES - The wetland class is Depressional

stream within a Depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small Your wetland unit seems to be difficult to classify and probably contains several different HGM wetland unit being scored. œ

NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit, classify the wetland using the class that represents more than 90% of the total area

HGM class to use in rating	Riverine	(Depressional)	Lakefringe	Depressional		Depressional	Riverine	Treat as	ESTUARINE
HGM classes within the wetland unit being rated	Slope+-Riverine	Slope + Depressional	Slope + Lake Etinge	Depressional + Riverine along stream	within boundary of depression	Depressional + Lake Fringe	Riverine + Lake Fringe	Salt Water Tidal Fringe and any other	class of freshwater wetland

l you are still unable to determine which of the above criteria apply to your wedand, or if you have more than 2 HGM classes within a wetland boundary, classify the wetland as Depressional for the

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90,000			L				•		Ľ	1		'	J —	<u> </u>	L		C	√ 		δ	ş
SOI	o improve water quality			ator leaving it (no outlet).	points ≈ 3	namently flowing outlet.	points flowing a solute	lowing ditch. points #1	definitions) Ves # 4 Note 0	r Forestod Councils classes	Politica .	Sa stolod	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	o marting o			Points 4	Costago Costago	0 = squipd	Add the points in the boxes above	Record the rating on the first page
DEPRESSIONAL AND FLATS WETLANDS	cators that the site functions to	ove water quality?	n the wetland:	UESTION 7 on key) with no surface w		or ditten, OK highly constricted perm	stricted, surface outlet that is berman	key), whose outlet is a permanently f	is true clay or true organic fuse NRC	Slants (Emergent, Serub-shrub, and/o	% of area	of area	of area	of area	tion:	onths. See description in manual.	otland	stland	etland	Add the	1
DEPRESSIC	Water Quality Functions - Indicators that the site functions to improve water quality	D 1.0. Does the site have the potential to improve water quality?	D 1.1. Characteristics of surface water outflows from the wetland:	Wetland is a depression or flat dopression (QUESTION 7 on key) with no surface water leaving it (no outlet),	West and bear the second the section of the second	The start of the s	Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch.	0.1.2. The sell 2 in below the surface for duff layer) is true clay or true organic (use NRCs definitions) year a mode of	D 1.3. Characteristics and distribution of pensistent plants (Emergent, Scrub-shrub, and/or Forestod Coupardia charges)	Wotland has persistent, ungrazed, plants > 95% of area	Wetland has persistent, ungrazed, plants > 1/2 of area	Wetland has persistent, ungrazed plants > 1/10 of area	Wetland has persistent, ungrazed plants <1/10 of area	D 1.4. Characteristics of seasonal ponding or inundation:	This is the area that is ponded for at least 2 months. See description in manual.	Area soasonally ponded is > ½ total area of wetland	Area seasonally ponded is > 1/2 total area of wetland	Area seasonally ponded is < ¼ total area of wetland	Total for D 1	Rating of Site Potential If score is: 12-16 # H 6-11 # M 0-5 # L

and self the line films are a second	מינים חוב שני שני שנים	2
D 2.0. Does the landscape have the potential to support the water quality function of the site?	37	
0 2.1. Does the wetland unit receive stormwater discharges?	Yes = 1 No = 0	L
0.2.2. is > 10% of the area within 150 ft of the wotland in land uses that generate pollutants?	Yes/#1)No=0	
D 2.3. Are there septic systems within 250 ft of the wetland?	Yes=1 No'=0)	4
D.2.4. Are there other sources of pollutants coming into the wetland that are not listed in growthows 1.2.1.1.2.3.2	21-0.322	
Source	Yes = 1 No fig)	0
Total for D 2 Add the points in the boxes above	boxes above	1

Rating of Landscape Potential if score is: 3 or 4 = H / Loc 2 = M O = L Record the reting on the first page

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D.4.0. Does the site have the potential to reduce flooding and ension? D.4.1. Characteristics of surface water outliews from the worthing:	i e
D 4.1. Characteristics of surface water outflows from the wetland:	
vater leaving it (no outlet) lighly constricted permanently flowing our ritet is a permanently flowing ditch	7
D 4.2. Death of storage during west periodic strimers the reight of ponding above the bottom of the outlet. For westlands with no outlet, measure from the surface of permanent water or if any the deepect part. Marks of ponding are 3 if or more above the surface or bottom of outlet. points = 7	
Markes of pouling between 2 ft to 3 af from surface or bottom of outlet points = 5 Markes are at loaze 0.5 ft to < 2 if from surface or bottom of outlet points = 3 The weetland is a "headwater" weetland Weetland is full to the small depressions on the surface that trap water points = 3 Marke of ponding less than 0.5 ft files that was that of 5 ft files than 0.5 ft files than 0.5 ft files that of 5 ft files than 0.5 ft file	O
In the watershee; Estimate the retio of the area of upstream and to the area of the wetland unit isod;. set he area of the unit the area of the unit the area of the unit	~)
Add the points in the boxes above	v
11= M <u>C</u> 0-5 = L Dort hydrologic functions of the site?	first page
D 5.1. Does the wedand receive stormwater discharges? Yes 2.1 No = 0	-
D.S.L. is 5-LUSO where allow within 150 ft of the weedand in land uses that generate excess runoff? Yezfe'l yo=0 D.S.J. is never than 25% of the centriburity basis of the weedand covered with intensive human land uses (Celebratia) at 3-1 reddence/bc, unban, commercial, argiculture, etc.)?	- 6
Add the points in the boxes above	9/9
Rading of Landscape Potential If score is: 3 = H / 1 or 2 = M O = L Record the rading on the first page	first page

_	_		•				
م	0	4	first page	West Section	- war	0	first page
O # Of T Post	D 5.3. Is more than 25% of the contributing basin of the wotland covered with intensive human land uses (residential at >1 residente/se, urban, commercial, agriculture, etc.)? Yes = 1. No ≠ 0.	Add the points in the boxes above	Rating of Landscape Potential if score is: 3 = H / Lor 2 = M O = L Record the rating on the first page	D 6.0. Are the hydrologic functions provided by the site valuable to society?	D. D. Liberuit is not above several to a several to a several consistency of the several conditions around the weddend unit heing rated. Do not add points. Choose the description that best matthes conditions around the weddend captures surface water that would capture. Choose the several finance than one condition is met. The weddend captures arriace water that would capture flow down-gradient into areas where flooding has damaged human or natural resources (e.g., houses or salmon reads): Plooding occurs in a sub-basin fast is immediately down-gradient. Plooding occurs in a sub-basin fast is immediately down-gradient. Plooding from groundwarter is an sub-basin fast the down-gradient. The existing or potential outflow from the werdand is so constrained by human or natural conditions that the water stored by the westiand cannot reach areas that flood. Explain why points = 0 There are no problems with flooding downstream of the wetland.	D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? Yes = 2 No.40	Total for D 6 Add the point in the boxes above Rating of Value if score is: 224 n H _ 1 n M _ 0 n L Record the rating on the first page

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41.3 squahern ob basin about

100 March 2017 (2017)	
R 1.0. Does the site have the potential to improve water quality?	
R.1.1. Area of surface deprossions within the Riverine wetland that can trap sediments during a flooding event:	ng a flooding event:
Depressions cover > 3/4 area of wedand	points # 8
Depressions cover > 1/2 area of wetland	points = 4
Depressions prosent but cover < % area of wetland	Na state of
No depressions present	O m Sulod
R 1.2. Structure of plants in the wedand (areas with >90% cover at person height, not Cowardin classes,	_
Tracs or shrubs $> 7/3$ area of the wetland	points = 8
Trees or shrubs $> 1/3$ area of the wetland	points = 6
Herbacoous plants (> 6 in high) > $\frac{3}{2}$, area of the wetland	points = 6
Herbaccous plants (> 6 in high) > $\frac{1}{2}$, area of the wetland	points = 3
shrubs, and ungrazed herbac	Da Saniod
Total for R 1	
Rating of Site Potential If score is: 12-16 = H6-11 = M6-5 = L	Record the rating on the first page
R 2.0, Does the landscape have the potential to support the water quality function of the site?	of the site?
R 2.1. is the wetland within an incorporated city or within its UGA?	Yes#2 No#0
R 2.2. Does the contributing basin to the wotland include a UGA-or incorporated area?	Yosel No=0
R 2.3. Doos at lost 10% of the contributing basin contain pilled fields, pastures, or forests that have been clearedt within the bast 5 years?	hat have been clearcut Yes # 1 No # 0
R 2.4. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutant?	HP Yes I Now 0
R.2.5. Are there other sources of pollutants confing into the wedand that are not listed in questions R.2.1-R.2.4. Othor sources.	questions R 2.1-R 2.4 Yes = 1 No = 0
Total for R2 Add the	Add the points in the boxes above
Rating of Landscape Potential 1/2.core is: 3-6 = H 1 or 2 = M 0 = L	Record the rating on the first page
R 3.0. Is the water quality improvement provided by the site valuable to society?	
R 3.1, is the wedland whing a stream or river that is on the 303(d) list or on a tributory that drains to one within 1 mil?	drains to one within 1 mi?
	Yes al No a 0
R 3.2. is the wetland along a stream or river that has TMDL limits for nutrients, toxics, or pathogens?	athogans? Yes=1 No=0
R 3.2. Has the site been identified in a watershed or local plan as important for maintaining water quality? (answer	Ewater quality? (onswer
	Add the points in the baxes above
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

Wetland name or number

Hydrologic Functions is indicators that site functions to requestitoding and stream erosion of a construction of the stream erosion.	ooding and stream erosion
NATIONAL LOCALITY SINGLE HAVE BYTE POLICIANT TO COLOCAL MONTHS AND AND AND AND AND AND AND AND AND AND	
R4.1. Characteristics of the oversank storage the wedening province: Estimate the aversas width of the wedenid perpendicular to the direction of the flow and the width of the	w and the width of the
stream or river channel (distance between banks). Calculate the ratio: (average width of wedand)/(average	dth of wetland]/(average
width of stream between banks).	
If the ratio is more than 20	ದಿ ಬಿರುಗಿದ್ದ
If the ratio is 10-20	points = 6
If the ratio is 5-<10	points = 4
If the ratio is 1-45	points ≠ 2
If the ratio is < 1	points # 1
R4.2. Characteristics of plants that slow down water velocities during floods: Treat large woody debris as forest or	woody debris as forest or
shrub. Choose the points appropriate for the best description (polygons need to have >90% cover at person	we >90% cover at person
height. Thase are <u>NOT Cowardin</u> classes).	`\
Forest or shrub for > 1/2 area OR emorgant plants > 2/2 area	points # 7
Forest or shrub for > 1/10 area OR emergent plants > 1/2 area	point = 4
Plants do not moet above criteria	points # 0
	Add the points in the boxes above
Rating of Site Potential If score is: 12-16 # H6-11 # M0-5 # L	Record the rating on the first page
R 5.0. Does the landscape have the potential to support the Aydrologic functions of the site?	of the site?
R.S.1. Is the stream or river adjacent to the worland downout?	Yes=0 No=1
R S.2. Does the up-gradient watershod included UGA or incorporated area?	Yes = 1 No # 0
R 5.3. Is the up-gradient stream or flyer controlled by dams?	Yes # 0 No m 1
Total for R5 Add t	Add the points in the boxes above
Rating of Landscape Potential If score is: 3 = H 10r2 = M 0 = L	Record the rating on the first page
R 6.0. Are the flydralogic functions provided by the sita valuable to society?	
R 6.1. Distance to the nearest areas downstroam that have flooding problems? / Choose the description that the first files the site is not also for the surface of the surface to the sur	bat result in damage to
human or natural resources (e.g., houses or salmon redds)	points = 2
Surface flooding problems are in a sub-basin farther down-gradient No flooding problems anywhere downstream	points ≈ 1 points ≈ 0
R.6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan?	a regional flood control plan?
	order respect to the board of the contract of the board o
lotal tor K 5	בייסטים בייסט שוו ווו פיוויסל פו

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HABITAT FUNCTIONS -	HABITAT FUNCTIONS - Indicators that site functions to provide important habitat	provide important habitat	
H 1.0. Does the site have	H 1.0. Does the site have the potential to provide habitat?		
H 1.1. Structuro of plant con Cowardin plant classe of % ac or more than 3 Aquatic bod Emergent	nmunity: indicators are Cowardin dosse ss in the welland. Up to 10 patches may 10% of the unit if it is smaller than 2.5 a	H 1.1. Structure of plant community; indicators are Cowardin classes and strate within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold of % acc more than 10% of more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked. — Aquatic bod — Astructures or more: points at the formal of	
Forested (areas v f the unit has a The Forested clas	Serub-town (areas where shrubs have > 30% cover) Forested (areas where trees have > 30% cover) Forested (areas where trees have > 30% cover) Aft be unit has a Forested dates, these, if it The Forested class has 3 out of 5 strins (canoy, sub-can that each cover 20% within the Forested polygon.	Saturbures, pointed 2. Saturbures, pointed 2. Saturbures, pointed 2. Saturbures, pointed 2. Saturbures, pointed 2. Saturbures, pointed 2. Saturbures, pointed 1. Saturbures, pointed 2. Saturb	N
H 1.2. Hydropenfods Check the types of water regimes (hy more than 10% of the wetland or % a Pormanently flooded or inundated Seasonally flooded or inundated Saturated only Pormanently flowing stream or regimently flowing stream or regimently flowing stream in, or.	Typicoperiods. Thygroperiods. Check the types of water regimes (hydroporiods) present within the wetland. The water inmer than 10% of the wetland or % acto count (see text for descriptions of hydroperiods). Permanently flooded or inundated Seasonally flooded or inundated Seasonally flooded or inundated Seasonally flooded or inundated Types Seasonally flooded or inundated Types Seasonally flooding stream or river in, or adjacent to, the wetland	egimo has t present: p present: p present: p	7
Freshwater tidal wetland	and wetland	2 points	
H 1.3. Retness of plant species Count the number of plants Different patches of the sam the species. Do not include if you counted: > 13 species 5 - 19 species < S - 59 species	Richness of plant species Clount from much of plant species in the wetland that cover at least 10 ft? Clount from number of plant species on the wetland that cover at least 10 ft? Highers parties of the same species can be combined to meet the size threshold and you do not have the species. Do not include Eurosian miljoil, reed conarygrass, purple hossestriffe, Canadian thistic if you counted: > 19 species 5 species < 5 species	Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft? Different partnes of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurosian milfoll, reed cananygrass, purple loosestrifle, Canadian thissie 1	
H 1.4. Interperden of habitate Doedde from the diagram the diagram the diagram the diagram to more pleme to more pleme to more pleme to more pleme to points.	Interspersion of habitats Decide from the daigrams below whether interspersion among Cowardin plants classes (d five classes and unvegetated areas (can include open water or mudilats) is high, moderate frow four or more plant classes or three classes and open water, the reting is always high, from four or more plant classes or three classes and open water, the reting is always high. The post of the classes of three classes and open water, the reting is always high. The post of the classes of three classes and open water, the reting is always high. The post of the classes of three classes and open water, the reting is always high.	escribed in the control of the contr	
All three diagrams in this row are HIGH = 3 points			

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Wetland name or number _

H 1.5. Spedal habitat features:

Record the rating on the first page Record the rating on the first page 4 \aleph Record the rating on the first page 9 J Choose the habitant features that are present in the wetland. The number of checks is the number of points, large, downed, woody debris within the wetland (> 4 in diameter and 6 it long).

Sanding snap; (dah > 4 in) within the wetland

Conditions are present for a Loans 6.6 if (I an) and/or overhanging plants extends at least 3.3 if (1 m)

Cover a stream or either jn, or contiguous with the wetland, for at least 33 if (10 m)

Stable steep banks of fine material that might be used by beaver or mustrat for denning (> 30 degree slope). OR signs of recent beaver activity are present (cut shrubs or trees that have not yet weathered points = 2 points 3 Add the points in the boxes above It provides habitat for Threatened or Endangares species (any plant or animal on the state or federal litts)
 It is mapped as a location for an individual WDFW priority species % undeturbed habitat + ((% moderate and low internsity land uses)/2] = 10 % points # 3 H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? Choose only the highest score that oppiles to the wedand being rated. Add the points in the boxes above points # 1 points × 0 ——At least % ac of thin-stommed persistont plants or woody branches are present in areas that are pormanently or seasonally inundated (structures for egg-loying by omphibians)
——Invadve plants cover less than 25% of the wetland area in every strotum of plants (see H.1.1 for list of — it is a Wotland of High Consorvation Value as determined by the Department of Natural Resources — It has been categorized as an important habitat site in a local or regional comprehensive plan, in a V) H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit). H 2.0. Does the landscape have the potential to support the habitat functions of the site? ୧୨ Rating of Landscape Potential if score is: 4-6 m H 1-3 m M < 1 m L Rating of Site Potential If score is: 15-18 # H / 7-14 # M D-6 # L Sitymeets ANY of the following criteria:

It has 3 or more priority habitats within 100 m (see next page) Shoreline Master Plan, or in a watershed plan Site has 1 or 2 priority habitats (listed on noxt page) within 100 m $\,$ H 3.0. Is the habitat provided by the site valuable to society? < 10% of 1 km Polygon H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. Site does not meet any of the criteria above
Rating of Value if score is: 2 = H ___1 = M __ 0 = L > 50% of 1 km Polygon is high intensity land use Undisturbed habitat 10-50% and in 1-3 patches Undisturbed habitat 10-50% and > 3 patches Undisturbed habitat < 10% of 1 km Polygor Undisturbed habitat > 50% of Polygon s 50% of 1 km Polygon is high intensity H 2.3. Land use intensity in 1 km Polygon: if where wood is exposed) > 1/1 (33.3%) of 1 km Polygon if total accessible habitat is: 20-33% of 1 km Polygon 10-19% of 1 km Polygon Calculate: Total for H 1

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Wetland name or number

WDFW Priority Habitats

Priority habitans listed by WDEW (see complete descriptions of WDFW priority habitans, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp. http://wdiw.wn.gov/publications/00165/wdfw30165.pdf or access the list from here:

1// pp, nuo//watw.wa.cov/publications/ut.tos// http://watw.wa.cov/conservation/phs/list/) Count how many of the following priority habitats are within 330 (t (100 m) of the wetland unit: NOTE: This question is independent of the land use between the wetland unit and the priority habitat.

- Aspen Stands: Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- Biodiversity Arcas and Corridors: Arcas of habitat that are relatively important to various species of native fish and
 widdlie (fail descriptions in WDFW PHS report).
- Herbaccous Baids: Variable size patches of grass and forbs on shallow solls over bedrock.
- Old-growth/Mature forests; <u>Old-growth west of Casando-crost</u> Stands of at least 2 tree species, forming a mulblayered canopy with occasional small openings; with at least 8 trees/c (20 trees/hu) > 22 in (81 cm) dbh or > 200 years of ago, <u>Mature Coccast</u> - Stands with average diameters exceeding 21 in (53 cm) dbh; crown covor may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.
- Orogon Whito Oaks. Woodland stands of pure oak or oak/conlier associations where canopy coverage of the oak. Komponent is important (jüli descriptions in WDFW PHS report p. 158 – see web link above).
- Riparian: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.
- ——— Instream: The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources.
- Mearshore: Rolativaly undisturbed nearshore habitats. These Include Coastal Nearshore, Open Coast Nearshore, and
 Puget Sound Nearshore. (full descriptions of habitats and the definition of relatively undisturbed are in WDFW report see web link on previous page).
- Caves: A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock,
 ice, or other geological formations and is large enough to contain a human.
- Cilifis: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.
- Talust Homogenous areas of rock rubble maging in average size 0.5 6.5 ft (0.15 2.0 m), composed of basalt, andosite,
 apd/or sedimentary rock including riprap sides and mine billings. May be associated with cliffs.
 Experience of the properties of the properties of the particle of the properties of the particle of the pa
- Snags and logs: Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavatori/use by wildlife. Priority snags have a diameter at breast height of > 20 in (51 cm) in western (4 washington and are > 6.5 ft (2 m) in height. Priority logs are > 1.2 in (30 cm) in diameter at the largest end, and > 20 it (6 m) long.

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed

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Wetland name or number

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Chart of any enterior that apply to the vertional Circle the enterior when the appropriate criteria are met.	
SC 1.0. Estuarine wetlands Does the wetland meet the following criteria for Estuarine wetlands?	
The dominant water regime is tidal,	
With a salinity greater than 0.5 ppt Yes -Go to SC1.1 (Nov Not an estuarine wettand	
SC 1.1. is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific Reserve designared under WAC 332-30-151? Yos = Category I No - Go to SC 1.2.	Cat.
SC 1.2. Is the wedland unit at least 1 ac in size and meets at least two of the following three conditions?	
— The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less than 10% cover of non-native plant species. (if non-native species are Sparting, see page 25)	- j
— At least % of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-	
- The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. No = Category I No = Category I	Catril
SC 2.0. Wetlands of High Conservation Value (WHCV)	
\$ % c	g.
Yes = Category No = Not a WHCV Yes = Category No = Not a WHCV See the working in a Section/Township/Range that contains a Natural Heritage wetland?	
http://www.l.dnr.wa.gov/nhp/refdes&lsansoarch/wnhowetlands.pdf //co a Not a WHCV //co a Not a WHCV	
SC 24. Has WDNR Identified the wetland within the S/T/R as a Wetland of High Consonation Value-offd listed it on their website? No a Not a WHCV	
SC 3.0. Bogs	
Does the wetland (or any part of the unit) meat both the criteria for soils and vegetation in bogs? Use the key below. If you answer YES you will still need to rate the wetland based on its functions.	_
2	
more of the first 32 in of the soil profile? Yes – 60 to SC3.3 No – 60 to SC3.2	
SC 3.2. Does an area within the wetland unit have organic soils, either peats or mucks, that are less than 16 in deep	
over begrock, or an importmosable narrapun such as way or vorume, son, or track are neutring or top or a way. Or bond? Yes – Go to 5C 3.3 No = 1s not a bog	
n area with peats or mucks have more than 70% cover of mosses at ground level, AN	
cover of plant species listed in Table 4? Yes = is a Category I bog No - Go to SC 3.4 NOTE: If you are uncertain about two actent of mosses in the understory, you may substitute that criterion by NOTE: If you are uncertain about two actent of mosses in the understory, you can if the other is not than 5 of another than 15 of the other is not than 5 of another than 15 of the other is not than 5 of another than 15 of another than	
plant species in Table 4 are present, the wetland is a bog.	ij
SC 3.4. Is an area with peats or mudes forested (> 30% cover) with Sitia spruce, subalpine fit, western red cedar, we western hended, deglepole pine, uptaking apopt, righelman repruce, or western white pine, AND any of the western hended, deglepole pine, uptaking apopt, righelman repruce, or western white pine, AND any of the wester for enably and the cover unger the canney?	
Yes a Is a Category I bog No a 1s not a bog	

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SC 4.0. Forested Weedands Does the weeland have at least 1_continuous_ace of forest that meets one of these criteria for the WA Dopartment of Fish and Wildlife's forests as priority habitacs? If you onswer YES you will still need to rate the wretend based on its functions. — Oile_growth forests (west of Cascade creat); Stands of at least two tree species, forming a multi-layered can pay with occasional small openings; with a least 8 trees/cc (20 trees/ha) that are at least 200 years of age OR have a diameter the threats height (shi) of 32 in (81 cm) or more. — Mature forests (west of the Cascade Creat); Stands where the largest trees are 80–200 years oil OR the species that make up the canopy have an average diameter (dish) exceeding 21 in (53 cm). Yes = Category I (No PNOs)	- 1 do
SC 5.0. Wethinds in Castal Lagoons Does the workland careful Lagoons Does the workland meet all of the following criteria of a wedland in a coastal lagoon? — The workland like in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks — The lagoon in which the workland is located cannains ponded water that is calline or brackels, to 5.p ppt) during most of the year in at least a portion of the lagoon (progle-ag be meesured moor the bottom) SC 5.1. Does the wetland meet all of the following three conditions? — The wetland is treatively undisturbed (has no disking, distaling, fulling, cultivation, grazing), and has less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). — At least X of the landward edge of the wetland has a 100 ft buffer of shrub, forcet, or un-grazed or unmoved grassland. — The wetland is larger than ½, as c (4350 ft?) Yes = Category II No = Category II	G Gt.
SC 5.0. In the terrorunal Westands Is the weelland west of the 1898 line (also called the Western Boundary of Upland Councirally or WBUO)? If you answer yes you will still need to rate the weelland based on its habitar functions. In practical terms that means the following goognaphic areas: I tong Beach Peninsula: Lands west of SR 103 Ocan Shore-Copalis: Lands west of SR 115 and SR 109 Yes – Go to SC 6.1 Nor not an interdunal weetland for rating SC 6.1. Is the wetland 1 as or larger and scores an 8 or 9 for the habitar functions on the form (rates H.H.H or H.H.M.M.)	Cat II
for the three aspects of function)? SC 6.2. Is the wedland 1 ac or larger, or is it in a mosale of wetlands that is 1 ac or larger? SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a mosale of wetlands that is between 0.1 and 1 ac? Yes = Category II No = Category IV Gatesory of wetland based on Soncial Chanamaries.	Ot. 11
Larugory or wedang based on Special Characteristics If you answered No for all types, enter "Not Applicable" on Summary Form	する

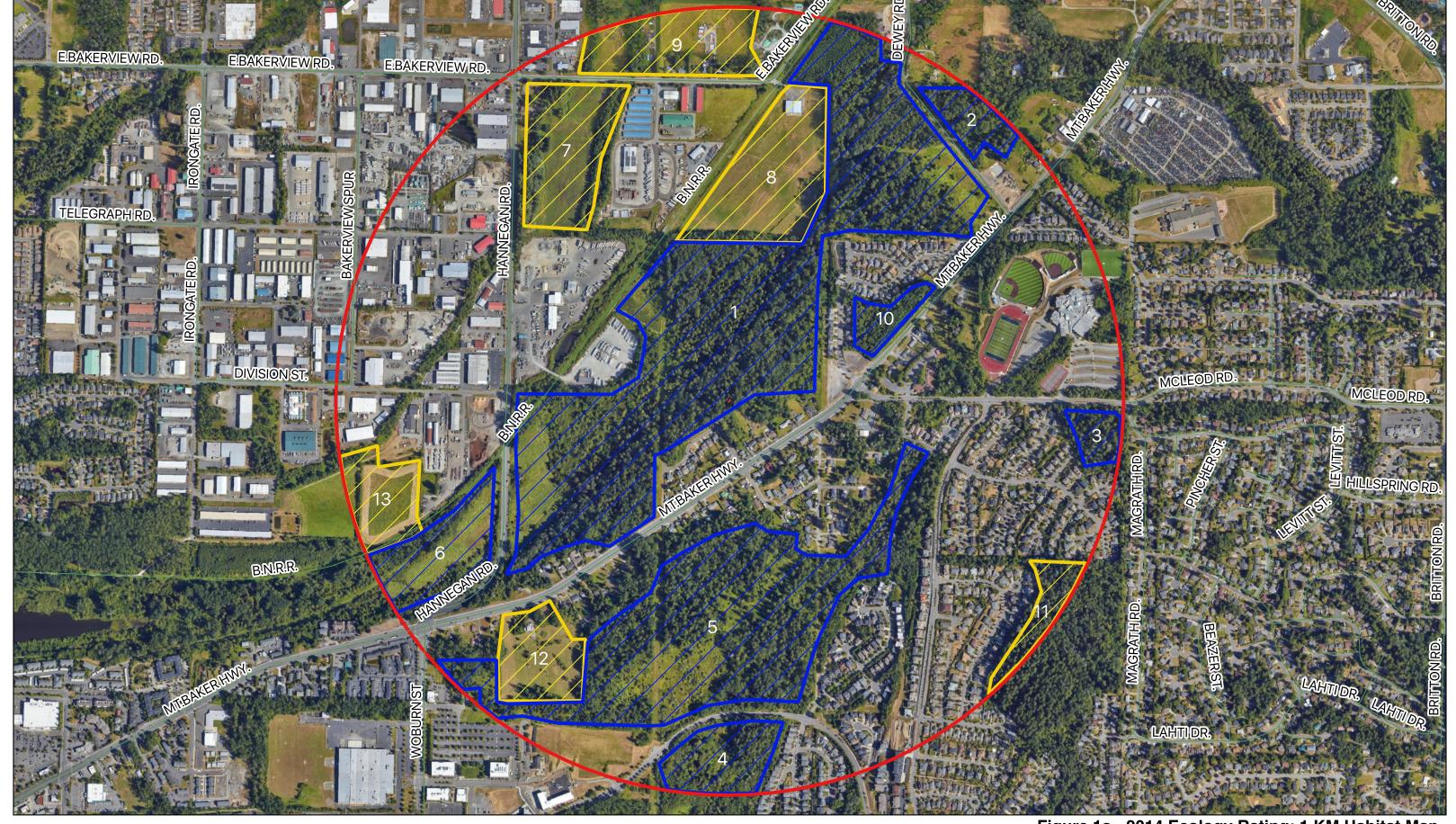
Wetland name or number

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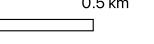
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2014 Ecology Rating Form Habitat Calculations - Sections H2.0

Lindshier Ave Project Wetland M

Accessible Habitat, Question H2.1							
Undisturbed Habitat			Moderate/Low Intensity Habitat				
Polygon #	Square Feet	Acres	Percentage of 1 km Polygon	Polygon #	Square Feet	Acres	Percentage of 1 km Polygon Divided by 2
Area 1	5,200,233	119	15.21%	Area 8	997,944	23	1.46%
		0	0.00%		1	0	0.00%
		0	0.00%			0	0.00%
		0	0.00%		1	0	0.00%
		0	0.00%			0	0.00%
		Total=	15.21%			Total=	1.46%

Total Accessible Undisturbed +

Ioderate/Low Intensity Habitat (H2.1) = 16.67%

Non-Accessible Habitat, Question H2.2							
Undisturbed Habitat			Moderate/Low Intensity Habitat				
			Percentage of				Percentage of 1 km
Polygon #	Square Feet	Acres	1 km Polygon	Polygon #	Square Feet	Acres	Polygon Divided by 2
Area 2	248,202	6	0.73%	Area 7	807,739	19	1.18%
Area 3	160,443	4	0.47%	Area 9	719,202	17	1.05%
Area 4	463,801	11	1.36%	Area 11	234,057	5	0.34%
Area 5	2,965,494	68	8.67%	Area 12	496,540	11	0.73%
Area 6	591,604	14	1.73%	Area 13	424,132	10	0.62%
Area 10	181,814	4	0.53%			0	0.00%
		0	0.00%			0	0.00%
		0	0.00%			0	0.00%
		0	0.00%			0	0.00%
		0	0.00%			0	0.00%
		Total=	13.49%			Total=	3.92%

Total Undisturbed Habita 28.69%
Total Moderate/Low Intensity Habitat 5.38%

Total Undisturbed + Moderate 34.07%

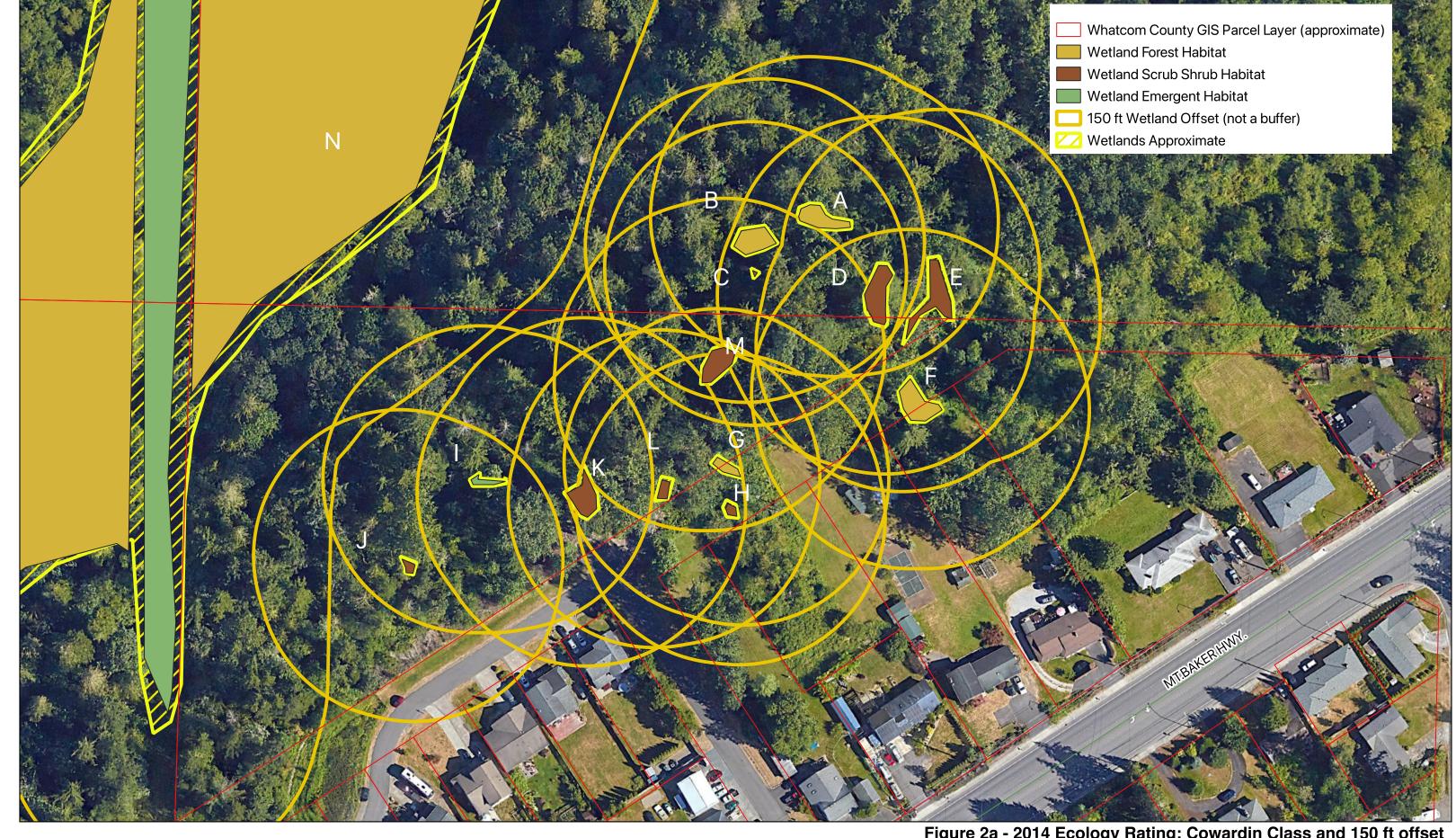
High Intensity Area (percent): 60.5

Area of Wetland (acres): 0.0

Area Within 1 km of Wetland: 785

(excluding wetland) (Acres) (Square Miles)

Note: All areas are approximate, based on 2016 aerial imagery or more current where available, as calculated in QGIS software. See Figure 1 for polygon locations.

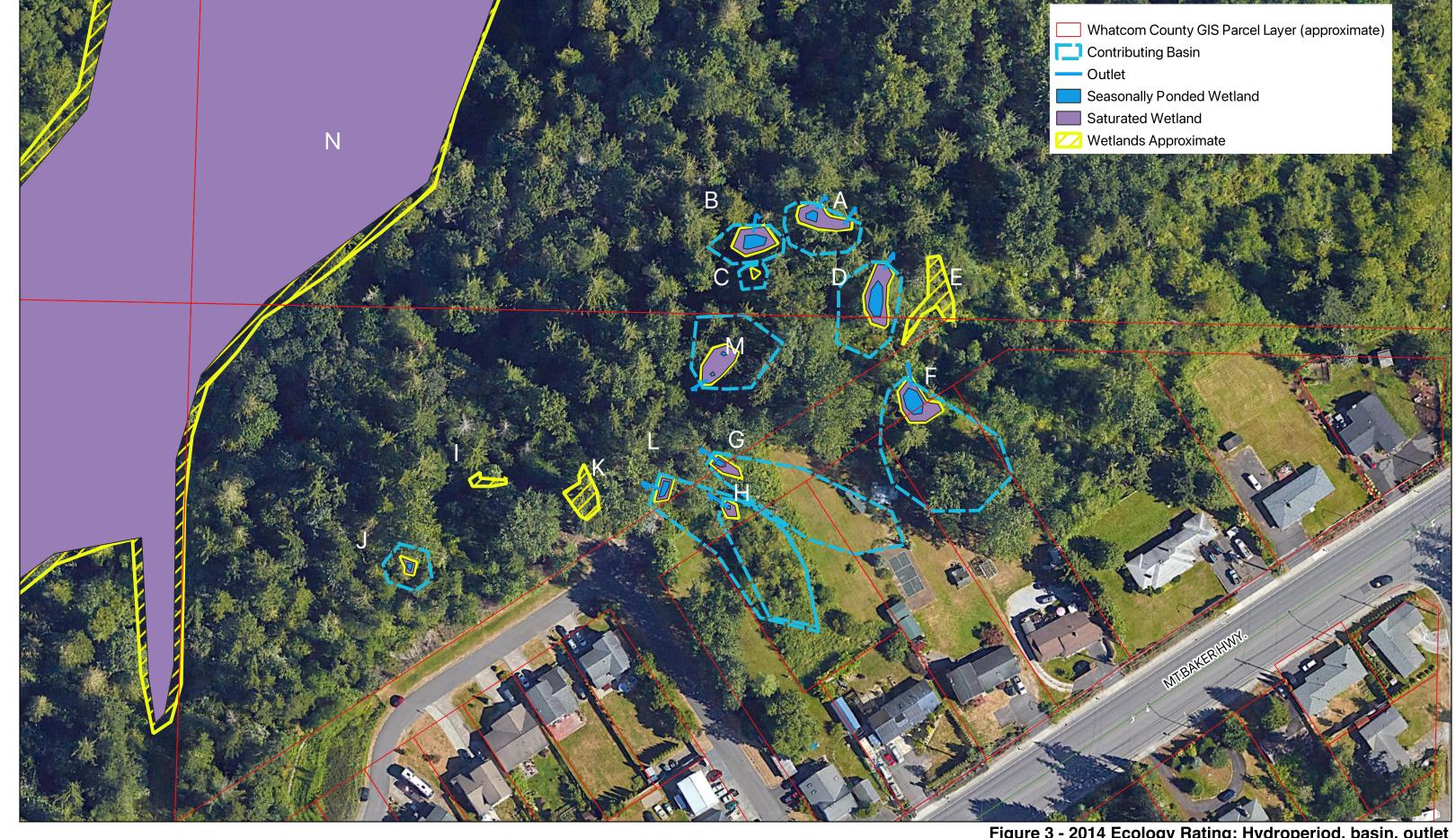




Wetland Scrub Shrub Habitat Wetland Forest Habitat Whatcom County GIS Parcel Layer (approximate)

Figure 2b - 2014 Ecology Rating: Cowardin Class and 150 ft offset
Lindshier Ave. Property
Miller Environmental Services.
Areas shown approximate. Aerial photo 2022







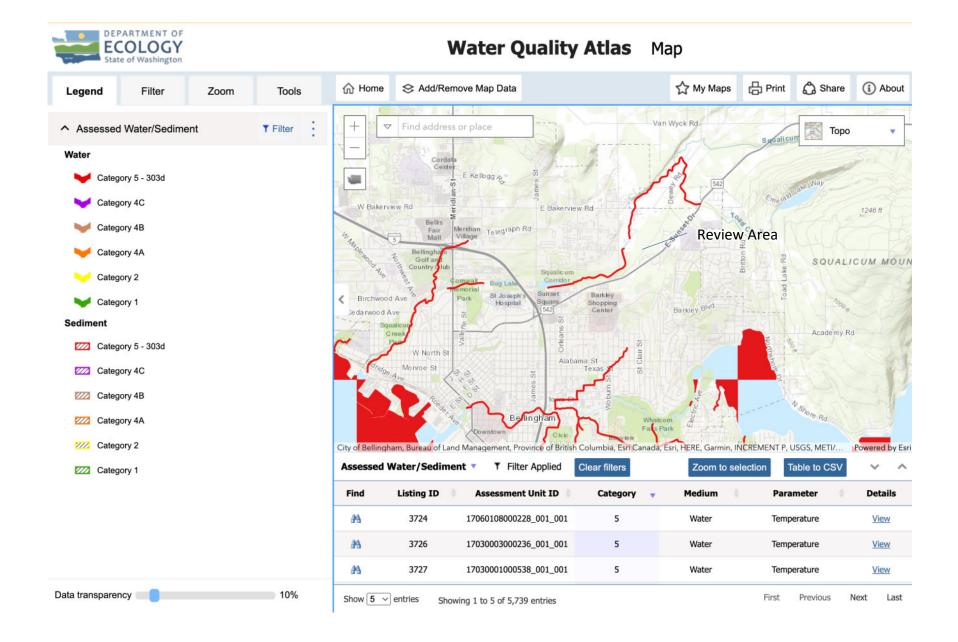


Figure 4. 2014 Ecology Rating Form Figure for Lindshier Ave Project – 303(d) Screenshot

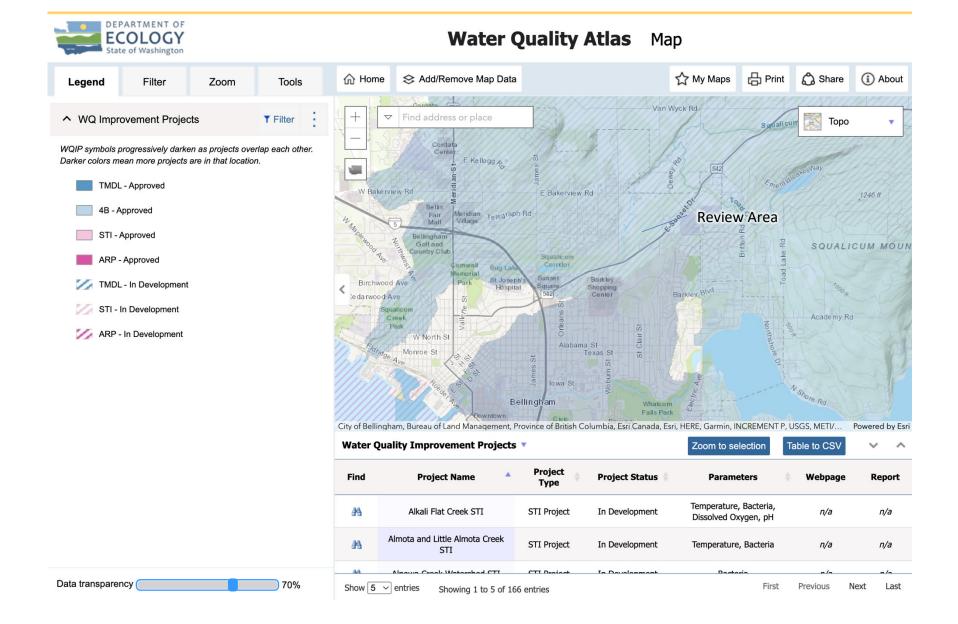


Figure 4. 2014 Ecology Rating Form Figure for Lindshier Ave Project – 303(d) Screenshot