

Soundview Consultants LLC

Environmental Assessment • Planning • Land Use Solutions

2907 Harborview Dr., Gig Harbor, WA 98335

Phone: (253) 514-8952 Fax: (253) 514-8954

Technical Memorandum

To: Ryan Larsen, Arlington 360

File Number: 2376.0008

From: Alex Murphy, Soundview Consultants LLC

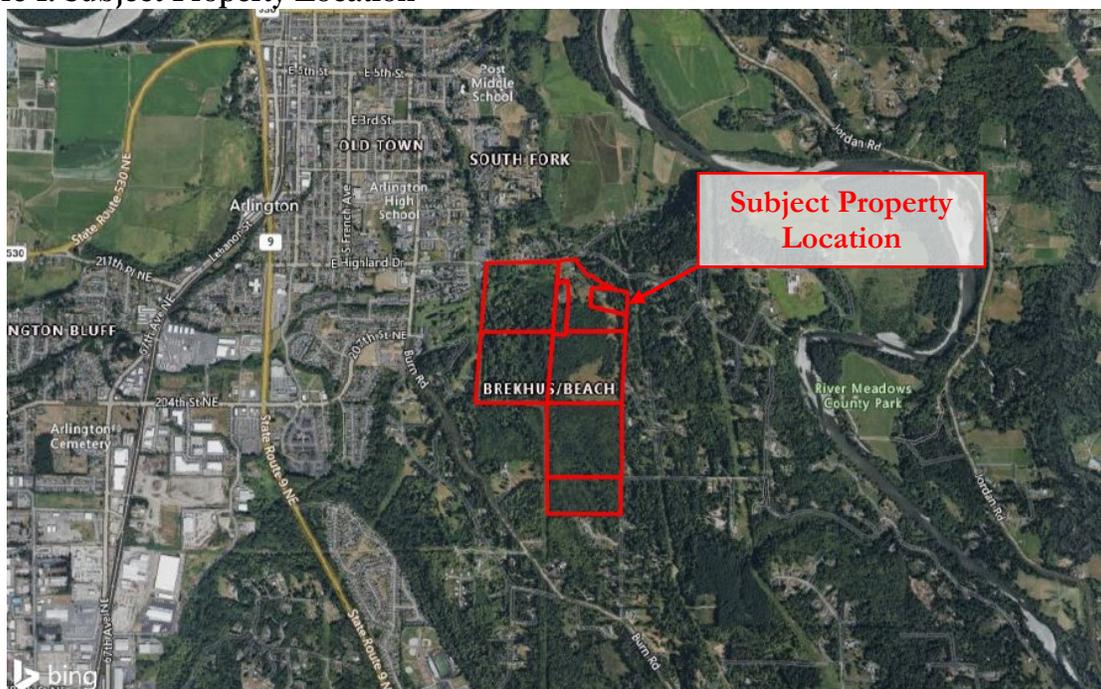
Date: February 19, 2025

Re: Wetland and Fish & Wildlife Habitat Assessment
Arlington 360 - 9104, 9110, 9116 and 8904 Tveit Road, Arlington, WA 98223

Dear Mr. Larsen,

Soundview Consultants LLC (SVC) performed a wetland, fish, and wildlife habitat assessment on a 208.78-acre site located at 9104, 9110, 9116 and 8904 Tveit Road in the City of Arlington (Figure 1). The subject property consists of eight parcels situated in the Southeast and Southwest $\frac{1}{4}$ of Section 12 and Northeast $\frac{1}{4}$ of Section 13, Township 31 North, Range 05 East, W.M. (Snohomish County Tax Parcel Numbers 31051200400200, 31051200401000, 31050200402300, 31051200400400, 31051300100200, 3105300100300, 31051200300100 and 31051200300500). SVC investigated the subject property for potentially regulated wetlands, streams, and other fish and wildlife habitat conservation areas. This Technical Memorandum contains field investigation results prepared to support future residential development of the subject property. An Existing Conditions Exhibit is provided in Attachment A.

Figure 1. Subject Property Location



Background Data

Prior to the site investigation, SVC staff conducted background research using Snohomish County Geographic Information System (GIS) data, Washington Department of Fish and Wildlife (WDFW) Priority Habitat and Species (PHS) tool, WDFW and Northwest Indian Fisheries Commission (NWIFC) Statewide Integrated Fish Distribution (SWIFD) mapping tool, U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI), Washington Department of Natural Resources (DNR) water typing map, and Natural Resource Conservation Service (NRCS) Soil Survey. Onsite determinations were made using observable vegetation, hydrology, and soils in conjunction with the sources listed above, U.S. Geological Survey (USGS) topographic maps, local precipitation data, and various orthophotographic resources.

Background Maps

The USFWS NWI Map (Attachment B1) and WDFW PHS map (Attachment B2) identify one potential freshwater emergent wetland/freshwater pond on the northeast portion of the subject property and one potential freshwater emergent wetland offsite to the north within 300 feet of the subject property. The Snohomish County critical areas map (Attachment B3) identifies two linear wetlands inventoried on the western parcels of the subject property, and one linear wetland inventoried on the northeast boundary of the subject property.

The NRCS soil survey map (Attachment B4) identifies six soil series on the subject property, as shown in Table 1 below.

Table 1. NRCS Soil Units.

Soil Series	Slope	Hydric Status ¹
Norma loam	0 to 8 percent	Hydric
Pastik silt loam	8 to 25 percent	Non-hydric
Tokul gravelly medial loam	0 to 8 percent	Non-hydric ²
	8 to 15 percent	Non-hydric ²
	15 to 30 percent	Non-hydric ²
Tokul-Winstron gravelly loam	25 to 65 percent	Non-hydric

1. NRCS State Hydric Soils List (NRCS, n.d.)

2. As much as 5 to 10 percent of mapped areas may contain inclusions of hydric soils.

The Snohomish County critical areas map and the DNR stream typing map (Attachment B5) identify several streams throughout the subject property. Two potential Type N (non-fish habitat) streams are identified on the southwestern-most corner of the subject property, originating offsite to the south and flowing north. The streams converge near the northwest corner of the subject property and transition to a potential Type F (fish habitat) channel and continue north along the western property boundary. Near the northwest corner of the subject property, the stream converges with a second stream channel (locally referred to as “Eagle Creek”) and continues north offsite. Eagle Creek is mapped on the west/central portion of the subject property, originating as a potential Type N channel on the southeast portion of the subject property, and flowing north/west. The stream transitions to a potential Type F channel on the central portion of the subject property and continues northwest, where it eventually converges with the channel further west and continues north offsite. A third

potential stream channel was identified on the northeast boundary of the subject property. The stream channel originates as two potential Type N channels offsite to the east. The channels converge and transition to a potential Type F channel on the northeast corner of the subject property and flows northwest along the northeast boundary of the subject property. The channel continues northwest beyond the northern property boundary, eventually converging with Eagle Creek offsite to the north.

The WDFW PHS map identifies occurrences of coho salmon (*Oncorhynchus kisutch*) in the westernmost mapped stream channel. The WDFW and NWIFC SWIFD map (Attachment B6) does not identify any documented or presumed occurrences of salmonids on or within 300 feet of the subject property.

Desktop Critical Areas Assessment

SVC previously completed a desktop existing conditions study using the background map resources described above in conjunction with LiDAR and topographic mapping resources for the East Hill Sub Area Plan, which includes the subject property. The results of this study are documented in the *Desktop Wetland, Stream, and Fish and Wildlife Habitat Existing Conditions Assessment – Arlington East Hill* (SVC, 2023).

The desktop assessment identified three potential streams coinciding with the Snohomish County and DNR mapping resources: two on the western and one on northeast portions of the subject property. Additionally, approximately three potential tributaries associated with the western stream were identified. Two potential offsite streams were also identified within 300 feet of the subject property; one to northeast of the northeast corner of the subject property and one to the west of the northwest portion of the subject property.

The desktop assessment also identified ten (10) potential wetlands onsite; four coinciding with identified stream channels on the western, central, and northeast portions of the subject property, and six distributed on the south-central and northeast portion of the subject property, independent of the identified streams. In addition, six (6) potential wetlands were identified offsite within 300 feet of the subject property, four to the west of the northwest portion of the subject property, and two offsite to the north.

No other potential wetlands, waterbodies, or fish and wildlife habitat conservation areas are identified on or within 300 feet of the subject property.

Methods

Formal site investigations were performed by qualified SVC staff during the Summer, Fall, and Winter of 2023 and Fall of 2024. The investigations consisted of wetland and stream delineations and walk-through surveys for waterbodies and other fish and wildlife habitat conservation areas on the subject property and publicly accessible areas within 300 feet of the subject property.

Wetlands, streams, and other fish and wildlife habitat are regulated features per Arlington Municipal Code (AMC) Chapter 20.93 – Critical Areas Ordinance.

Wetland presence and boundaries were determined using the routine approach described in the U.S. Army Corps of Engineers (USACE) *Wetlands Delineation Manual* (Environmental Laboratory, 1987) and modified according to the guidelines established in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (Version 2.0) (USACE, 2010) and *Field Indicators of Hydric Soils in the United States* (NRCS, 2018). Qualified scientists marked

boundaries of onsite wetlands with orange surveyor's flagging labeled alpha-numerically and tied to 3-foot lath or vegetation along the wetland boundary, beginning at the start of the alphabet. Onsite features were assigned letters, whereas offsite features were assigned numbers. Pink surveyor's flagging was labeled numerically and tied to 3-foot lath or vegetation at formal sampling locations to mark the points where detailed data was collected (DP-1 to DP-61). Several data plot numbers (21, 22, 23, 55, and 56) were inadvertently duplicated during the data collection process, duplicate numbers were assigned an "E" for east or "W" for west to denote their location on the site. Additionally, one number (37) was inadvertently skipped during the data collection process. Additional tests pits were excavated inside and outside of wetland boundaries to confirm delineations, as well as confirm non-wetland conditions in uplands. Offsite wetland areas were not formally delineated; wetland boundaries were estimated using a combination of field observations, LiDAR imagery, and topographic mapping resources.

Wetlands were classified using both the hydrogeomorphic and Cowardin (Federal Geographic Data Committee, 2013) classification systems. Following classification and assessment, wetlands were rated and categorized using *Washington State Wetland Rating System for Western Washington* (Hruby and Yahnke, 2023) consistent with the requirements of AMC 20.93.800(a).

Ordinary high water (OHW) mark determinations were made using Washington State Department of Ecology's (WSDOE's) methodology, as detailed in *Determining the Ordinary High Water Mark for Shoreline Management Act Compliance in Washington State* (Anderson et al., 2016). To mark the banks (for stream segments >6 feet wide) or centerline (for stream segments ≤6 feet wide) of potentially regulated waters, blue surveyor's flagging was alpha-numerically labeled and tied to vegetation or lath, beginning at the end of the alphabet and working backwards. Streams and surface water features were classified using the DNR water typing system as outlined in Washington Administrative Code (WAC) 222-16-030 consistent with the requirements of AMC 20.93.700(a). Offsite stream segments were not formally delineated; ordinary high water was estimated using a combination of field observations, LiDAR imagery, and topographic mapping resources.

The fish and wildlife habitat assessment was conducted during the same site visits by the biologist. The biologist made visual observations using stationery and walking survey methods for upland and aquatic habitats noting any special habitat features or and direct and indirect signs of fish and wildlife activity (e.g. nesting, foraging, and migration/movement). Special attention was given to assessing the presence of fish and wildlife habitat conservation areas outlined under AMC 20.93.400.

Precipitation

Precipitation data was obtained from the National Oceanic and Atmospheric Administration (NOAA) weather station in Sedro-Woolley in order to acquire percent of normal precipitation during and preceding the 2023 site investigations. Precipitation data for the September 2024 site investigation was obtained from the Everett Snohomish County Airport weather station as the Sedro-Woolley station was missing data for two months preceding the investigation. A summary of data collected is provided in Table 1 below.

Table 2. Precipitation Summary¹.

Site Visit Date	Day Of	Day Before	1 Week Prior	2 Weeks Prior	30 Days Prior (Observed/Normal)	Year to Date (Observed/Normal) ²	Percent of Normal ³
08/22/2023	0.00	0.00	0.00	0.04	0.43/1.28	17.69/27.59	34/64
10/25/2023	0.79	0.03	1.35	2.29	3.35/4.42	23.02/34.86	76/67
10/26/2023	0.02	0.79	1.17	2.08	3.11/4.52	23.04/35.06	68/65
10/30/2023	0.00	0.00	1.05	2.00	2.66/4.88	23.05/35.65	55/66
10/31/2023	0.00	0.00	0.85	1.74	2.63/4.98	23.05/36.06	53/64
11/01/2023	0.00	0.00	0.82	1.38	2.62/5.09	2.63/5.20	51/51
11/7/2023	0.46	0.07	2.94	3.79	5.36/5.77	5.57/6.60	93/84
11/8/2023	0.11	0.46	3.05	3.87	5.47/5.87	5.68/6.84	93/83
11/9/2023	0.01	0.11	3.06	3.09	5.47/5.96	5.69/7.08	92/80
11/10/2023	0.07	0.01	2.03	3.14	5.45/6.05	5.76/7.31	90/79
11/14/2023	0.02	0.35	1.86	4.34	6.35/6.40	6.97/8.27	99/84
11/15/2023	0.01	0.02	1.41	4.35	6.35/6.49	6.98/8.52	98/82
11/16/2023	0.02	0.01	1.32	4.37	6.11/6.58	7.00/8.77	93/80
11/28/2023	0.00	0.02	0.35	0.81	5.13/7.19	7.76/11.56	71/67
11/29/2023	0.00	0.00	0.35	0.79	5.13/7.21	7.76/11.78	71/66
12/21/2023	0.00	0.03	0.28	2.55	6.05/5.86	13.46/15.61	103/86
09/18/2024	0.01	0.00	0.55	0.56	2.36/1.43	17.98/19.77	165/91

1. Precipitation volume provided in inches. Data obtained from NOAA (<http://w2.weather.gov/climate/xmacis.php?wfo=sew>) for Sedro-Woolley and .
2. Year-to-date precipitation is for the 2023 calendar year from January 1, 2023 to the August and October 2023 site visit dates, for the 2023/2024 water year from October 1, 2023 to the November and December 2023 site visit dates, and for the 2024 calendar year from January 1, 2024 to the September 2024 site visit date.
3. Percent of normal is shown for the prior 30 days and year-to-date.

Precipitation levels during the August 22, 2023, site visit were below statistical normal range (70 to 130 percent of normal) for the 2023 calendar year (67 percent of normal) and the prior 30 days (34 percent of normal). Given that August is one of the driest months of the year in the greater Pacific Northwest (PNW) region, these conditions were relatively normal for this time of year.

Conditions during the October and November 2023 site investigations underwent a cycle of drier than normal conditions followed by short, but intense, periods of precipitation. Shorter, more concentrated periods of rainfall can result in exaggerated hydrological conditions due to increased surface runoff and the rainfall rate exceeding the soil's rate of infiltration or percolation. These conditions tend to appear wetter than if the same amount of precipitation had occurred over a longer period of time, but also may quickly drain via surface water. In areas where a surface outlet is present, conditions may equalize relatively quickly once rainfall has stopped. Similarly, areas without surface outlets may equalize quickly if soils are well-drained.

Precipitation levels during the October 2023 site visits were below the statistical normal range for the 2023 calendar year (ranging from 64 to 67 percent of normal). For the prior 30 days, precipitation levels began within the statistical normal range (76 percent of normal) after observing over 2 inches of precipitation in the two weeks leading up to the October 25th site visit. Following October 25th, precipitation levels were lower than the statistical normal range (53 to 68 percent of normal). This precipitation data suggests that hydrologic conditions ranged from normal to slightly drier than normal during the October 2023 site investigations.

Precipitation levels during the November 1, 2023, site visit were below the statistical normal range for both the prior 30 days and the 2023/2024 water year (51 percent of normal). Following nearly 3 inches of precipitation in the week prior to the November 7, 2023, site visit, precipitation conditions

normalized for both the prior 30 days (ranging from 90 to 98 percent of normal) and the 2023/2024 water year (ranging from 79 to 84 percent of normal) for site visits conducted between November 7 – November 16, 2023. Given the amount of precipitation that occurred during a short period of time leading up to and during these investigations (approximately 3 inches in the prior week), hydrologic conditions onsite may have been normal to slightly wetter than normal, resulting in areas that are normally dry supporting surface of high groundwater for short periods of time.

Precipitation levels during the December 21, 2023, site visit were within the statistical normal range for both the prior 30 days and the 2023/2024 water year (103 and 86 percent of normal, respectively).

September is one of the driest months in the Pacific Northwest. Precipitation levels during the September 18, 2024 site visit were within the statistical normal range for the 2024 calendar year (91 percent of normal) above the statistical normal range for the prior 30 days (165 percent of normal). However, while this is an above average level of rainfall for this time period, 2.36 inches of rainfall over 30 days would not likely result in an exaggeration of hydrology onsite. Therefore, hydrology conditions were relatively normal for this time of year.

These conditions were considered when making professional wetland boundary determinations.

Results

The 208.78-acre subject property is located near the northeastern boundary of the City of Arlington and within the Stillaguamish watershed (Water Resource Inventory Area 5). It is zoned Residential Ultra Low Capacity (RULC), Residential Low Capacity (RLC), and Residential High Capacity (RHC) and contains a mix of low-density single-family development, utility corridors, and forestry and agriculture uses. Surrounding development includes multi-family and single-family residential developments, utility property, agricultural fields, undeveloped forest areas, and local roadways.

Topography throughout most of the subject property is generally flat with a gentle slope from the southeast to the northwest. Steep slopes, generally in an east to west orientation, associated with ravines occur along the northern portion of the study area. Elevations range from approximately 440 feet above mean sea level (amsl) on the southeast corner of the subject property to approximately 145 feet amsl on the northwest corner of the subject property. A Snohomish County contours map is provided in Attachment B7.

The subject property has been modified by land clearing for a mix of residential development and forestry activities. Four single-family residential developments and associated infrastructure are present along the northern boundary and throughout the northwest corner of the subject property. In addition, overgrown access roads are present throughout the subject property. Upland vegetation on the subject property consists of a mix of undeveloped forest and scrub shrub areas dominated by bigleaf maple (*Acer macrophyllum*), Douglas fir (*Pseudotsuga menziesii*), Western red cedar (*Thuja plicata*), Western hemlock (*Tsuga heterophylla*), birch (*Betula sp.*), red alder (*Alnus rubra*), salmonberry (*Rubus spectabilis*), vine maple (*Acer circinatum*), osoberry (*Oemleria cerasiformis*), beaked hazelnut (*Corylus cornuta*), red elderberry (*Sambucus racemosa*), western swordfern (*Polystichum munitum*), trailing blackberry (*Rubus ursinus*), and non-native invasive Himalayan blackberry (*Rubus armeniacus*) and cutleaf blackberry (*Rubus laciniatus*). The field areas dominated by colonial bentgrass (*Agrostis capillaris*), creeping buttercup (*Ranunculus repens*), sweet vernalgrass (*Anthoxanthum odoratum*), common velvetgrass (*Holcus lanatus*), hairy brackenfern (*Pteridium aquilinum*), orchard grass (*Dactylis glomerata*), and non-native invasive reed canarygrass (*Phalaris arundinacea*).

SVC identified 26 wetlands (Wetlands A-Z & 5) and 5 streams (Streams V, W, X, Y, and Z) on the subject property. Additionally, several non-regulated ditch and drainage features were identified on the subject property, and five wetlands (Wetlands 1-4 and Wetland 6) were identified offsite within 300 feet of the subject property. Wetland 5 was initially identified as offsite during field investigations according to statewide parcel data but found to be onsite when the property was surveyed. The identified critical areas are summarized in the discussions below. Photographs of the identified critical areas are provided in Attachment C. No photos of Wetlands X, Y, or 1-5 were captured.

Wetlands

The identified wetlands (Wetlands A-Z and Wetlands 1-6) contained indicators of wetland hydrology, hydric soils (presumed for Wetlands 1-5), and a predominance of hydrophytic vegetation according to current wetland delineation methodology. Presence of hydric soils and wetland hydrology were confirmed within Wetlands X and Y; however, due to their locations adjacent to streams and opposite of potential development areas, they were not delineated, and no formal data was collected. Additionally, offsite features were not delineated, and data could not be collected. Wetland boundaries for these un-delineated features were estimated based on field observations, LiDAR imagery, and/or topographic mapping resources. The identified wetland boundaries are depicted on the existing conditions exhibit in Attachment A. The data forms are provided in Attachment D. Wetland rating forms and figures are provided in Attachments E and F, respectively. Table 3 summarizes the wetlands identified during the site investigation.

Table 3. Wetland Summary

Wetland	Predominant Wetland Classification / Rating			Onsite Wetland Area (square ft)
	Cowardin ¹	HGM	City of Arlington ²	
A	PFO/SSAB	Depressional	III	1,315
B	PFO/SSAB	Slope	III	40,032
C	PSSAB	Riverine	II	715
D/H	PFO/SSAB	Slope	III	81,728
E	PSSB	Slope	III	34,492
F	PSS/EMBC	Depressional	III	4,467
G	PSS/EMB	Slope	III	8,377
I	PSSB	Slope	III	5,747
J	PSSB	Depressional	III	5,231
K	PSS/EMB	Depressional	III	9,961
L	PSSAB	Slope	III	16,566
M	PSSB	Slope	III	225
N	PSSB	Slope	III	753
O	PFO/SSAB	Slope	III	32,418
P	PFO/SSAC	Depressional	III	~14,138

Wetland	Predominant Wetland Classification / Rating			Onsite Wetland Area (square ft)
	Cowardin ¹	HGM	City of Arlington ²	
Q	PFO/SS/EMAB	Depressional	III	16,203
R	PSSB	Slope	III	6,763
S	PFO/SSB	Slope	III	23,085
T	PFO/SSBC	Depressional	III	~21,724
U	PFO/SSAC	Depressional	II	6,408
V	PSSA	Depressional	III	62,817
W	PFOA	Depressional	III	12,539
X	PSSB	Slope	III	~7,687
Y	PFO/SSB	Slope	III	~8,296
Z	PSSB	Depressional	IV	~2,057
1	PEMC	Depressional	IV	N/A – Offsite
2	PEMB	Slope	IV	N/A – Offsite
3	PFO/SSAB	Depressional	II	N/A – Offsite
4	PEMB	Depressional	III	N/A – Offsite
5	PFO/SSB	Slope	III	~17,449
6	PSSB	Depressional	III	N/A - Offsite

Table 1 Notes:

- Cowardin et al. (1979) or NWI Class based on vegetation: PFO = Palustrine Forested; PSS = Scrub-Shrub; PEM = Emergent; Modifiers for Water Regime: A = Temporarily Flooded, B = Seasonally Saturated, C = Seasonally Flooded
- Wetland rating designations per AMC 20.93.800(a).

Wetland A

Wetland A is 1,315 square feet (0.03 acre) in size onsite and located on the western boundary of the southernmost parcel on the subject property (Parcel Number 31051300100300). Hydrology for Wetland A is provided by surface sheet flow from adjacent uplands, direct precipitation, and a seasonally high groundwater table. Wetland vegetation is dominated by Pacific willow (*Salix lasiandra*), western red cedar (*Thuja plicata*), Hooker's willow (*Salix hookeriana*), salmonberry (*Rubus spectabilis*), hardhack (*Spiraea douglasii*), and non-native invasive reed canarygrass. Hydric soil indicator F6 (Redox Dark Surface) was observed. The wetland boundary was delineated based on a topographic drop, and transition to a hydrophytic plant community and hydric soils. The onsite buffer is partially degraded due to the presence of a maintained power line right-of-way (ROW), but otherwise consists of relatively intact forest habitat. Wetland A is a Palustrine Forested and Scrub-Shrub, Temporarily Flooded and Seasonally Saturated (PFO/SSAB) depressional wetland.

Wetland B

Wetland B is 40,032 square feet (0.92 acre) in size onsite and located northwest portion of the subject property, adjacent to Stream Y and to the north/west of Wetland D/H, east of Wetlands E and G,

and south of Wetland C. Hydrology for Wetland B is provided by surface sheet flow from adjacent uplands, direct precipitation, a seasonally high groundwater table, and occasional flooding due to seeps discharging groundwater throughout the slope. Hydrology from Wetland B drains downslope to Stream Y where it is then conveyed north, traversing Wetland C before eventually draining to Stream Z. Wetland vegetation is dominated by western red cedar, salmonberry, stink currant (*Ribes bracteosum*), and non-native invasive Himalayan blackberry. Hydric soil indicators A11 (Depleted Below Dark Surface) and F2 (Loamy Gleyed Matrix) were observed. The wetland boundary was delineated based on a transition to hydric soils. The onsite buffer is partially degraded due to the presence of a cleared access road, but otherwise consists of relatively intact forest habitat. Wetland B is a Palustrine Forested and Scrub-Shrub, Temporarily Flooded and Seasonally Saturated (PFO/SSAB) slope wetland.

Wetland C

Wetland C is 715 square feet (0.02 acre) in size onsite and located on the northwest corner portion of the subject property, adjacent to Stream Y and north/west of Wetland B. Hydrology for Wetland C is provided by surface sheet flow from adjacent uplands, direct precipitation, a seasonally high groundwater table, and occasional overbank flooding from Stream Y. Hydrology from Wetland C drains downslope to Stream Y where it is then conveyed northwest, eventually draining to Stream Z. Wetland vegetation is dominated by salmonberry, stink currant, and youth-on-age (*Tolemia menziesii*) and non-native invasive Himalayan blackberry. Hydric soil indicators A11 (Depleted Below Dark Surface) and F6 (Redox Dark Surface) were observed. The wetland boundary was delineated based on geomorphic position and a transition to hydric soils. The onsite buffer consists of relatively intact forest habitat. Wetland C is a Palustrine Scrub-Shrub, Temporarily Flooded and Seasonally Saturated (PSSAB) riverine wetland.

Wetland D/H

Wetland D/H is 81,728 square feet (1.88 acre) in size onsite and located on the central and western portions of the subject property, adjacent to Streams W and Y and east of Wetlands B, I, and O. Hydrology for Wetland D/H is provided by surface sheet flow from adjacent uplands, direct precipitation, a seasonally high groundwater table, and occasional flooding due to seeps discharging groundwater throughout the slope. Hydrology from Wetland D/H drains downslope to Stream Y where it is then conveyed north/west, traversing Wetland C before eventually draining to Stream Z. Wetland vegetation is dominated by western red cedar, red alder, stink currant, vine maple, salmonberry, youth-on-age, and ladyfern (*Athyrium cylcosorum*). Hydric soil indicator F6 (Redox Dark Surface) was observed. The wetland boundary was delineated based on a transition to hydric soils. The onsite buffer consists of relatively intact forest habitat. Wetland D/H is a Palustrine Forested and Scrub-Shrub, Temporarily Flooded and Seasonally Saturated (PFO/SSAB) slope wetland.

Wetland E

Wetland E is 34,492 square feet (0.79 acre) in size onsite and located centrally on the western half of the subject property, adjacent to Stream X and west of Wetlands B and O, south of Wetland G, and west of Wetlands L and X. Hydrology for Wetland E is provided by surface sheet flow from adjacent uplands, direct precipitation, and a seasonally high groundwater table. Hydrology from Wetland E drains downslope to Stream X where it is then conveyed northwest, traversing Wetlands G and P before eventually draining to Stream Z. Wetland vegetation is dominated by salmonberry and non-native invasive Himalayan blackberry. Hydric soil indicator A11 (Depleted Below Dark Surface) was observed. The wetland boundary was delineated based on a transition to hydric soils. The onsite buffer

consists of relatively intact forest habitat with patches of non-native invasive Himalayan blackberry. Wetland E is a Palustrine Scrub-Shrub, Seasonally Saturated (PSSB) slope wetland.

Wetland F

Wetland F is 4,467 square feet (0.10 acre) in size onsite and located centrally on the eastern boundary of the subject property, south of Wetland Q. Hydrology for Wetland F is provided by surface sheet flow from adjacent uplands, direct precipitation, and a seasonally high groundwater table. Wetland vegetation is dominated by redosier dogwood (*Cornus alba*), salmonberry, ladyfern, tall fescue (*Schedonorus arundinaceus*), and creeping buttercup. Hydric soil indicators A11 (Depleted Below Dark Surface), F3 (Depleted Matrix), and F6 (Redox Dark Surface) were observed. The wetland boundary was delineated based on a topographic drop and transition to hydrophytic vegetation and hydric soils. The onsite buffer is partially degraded due to prior land clearing and maintenance of the field. Wetland F is a Palustrine Scrub-Shrub and Emergent, Seasonally Saturated and Seasonally Flooded (PSS/EMBC) depressional wetland.

Wetland G

Wetland G is 8,377 square feet (0.19 acre) in size onsite and located on the northwest portion of the subject property, adjacent to Stream X and to the north/west of Wetland E and east of Wetland P. Hydrology for Wetland G is provided by surface sheet flow from adjacent uplands, direct precipitation, and a seasonally high groundwater table. Hydrology from Wetland G drains downslope overland and through a series of excavated ditches to Stream X, where it is conveyed northwest, traversing Wetland P before draining to Stream Z. Wetland vegetation is dominated by salmonberry, stink currant, vine maple, creeping buttercup, field horsetail (*Equisetum arvense*), youth-on-age, yellow skunk cabbage (*Lysichiton americanus*), and non-native invasive Himalayan blackberry. Hydric soil indicators A11 (Depleted Below Dark Surface) and F6 (Redox Dark Surface) were observed. The wetland boundary was delineated based on a transition to a hydrophytic plant community and hydric soils. The onsite buffer consists of relatively intact forest habitat. Wetland G is a Palustrine Scrub-Shrub and Emergent, Seasonally Saturated (PSS/EMB) slope wetland.

Wetland I

Wetland I is 5,747 square feet (0.13 acre) in size onsite and located on the southeast corner of the southwestern-most parcel of the subject property (Parcel Number 31051200300500), adjacent to Stream Y and west of Wetland D/H. Hydrology for Wetland I is provided by surface sheet flow from adjacent uplands, direct precipitation, and a seasonally high groundwater table. Hydrology from Wetland I drains downslope to Stream Y, where it is conveyed northwest, traversing Wetlands D/H, O, B, and C prior to draining to Stream Z. Wetland vegetation is dominated by salmonberry, ladyfern, youth-on-age, and creeping buttercup. Hydric soil indicators A4 (Hydrogen Sulfide) and F1 (Loamy Mucky Mineral) were observed. The wetland boundary was delineated based on a transition to hydric soils. The onsite buffer consists of relatively intact forest habitat. Wetland I is a Palustrine Scrub-Shrub, Seasonally Saturated (PSSB) slope wetland.

Wetland J

Wetland J is 5,231 square feet (0.12 acre) in size onsite and located on the southwest boundary of the subject property extending slightly south offsite, adjacent to Stream Z and south of Wetland K. Hydrology for Wetland J is provided by surface sheet flow from adjacent uplands, direct precipitation, and a seasonally high groundwater table. Wetland J is a headwater wetland for Stream Z. Hydrology

from Wetland J is conveyed north through Stream Z, which traverses Wetland K, L, X, and P and eventually drains offsite to the north. Wetland vegetation is dominated by salmonberry and Hooker's willow. Hydric soil indicator A11 (Depleted Below Dark Surface) was observed. The wetland boundary was delineated based on a topographic drop and transition to hydric soils. The onsite buffer is partially degraded due to the presence of a cleared access road, but otherwise consists of relatively intact forest habitat. Wetland J is a Palustrine Scrub-Shrub, Seasonally Saturated (PSSB) depressional wetland.

Wetland K

Wetland K is 9,961 square feet (0.23 acre) in size onsite and located on the southwest portion of the subject property, north of Wetland J and south of Wetland L. Hydrology for Wetland K is provided by surface sheet flow from adjacent uplands, direct precipitation, and a seasonally high groundwater table. Hydrology from Wetland K is conveyed north through Stream Z, which traverses Wetlands L, X, and P and eventually drains offsite to the north. Wetland vegetation is dominated by salmonberry, and youth-on-age. Hydric soil indicator A11 (Depleted Below Dark Surface) was observed. The wetland boundary was delineated based on a topographic drop and transition to hydric soils. The onsite buffer consists of relatively intact forest habitat. Wetland K is a Palustrine Scrub-Shrub and Emergent, Seasonally Saturated (PSS/EMB) depressional wetland.

Wetland L

Wetland L is 16,566 square feet (0.38 acre) in size onsite and located centrally near the western boundary of the subject property, north of Wetland K, east of Wetland M, and southwest of Wetland E. Hydrology for Wetland L is provided by surface sheet flow from adjacent uplands, direct precipitation, a seasonally high groundwater table, and occasional flooding due to seeps discharging groundwater throughout the slope. Hydrology from Wetland L drains downslope overland and via two seasonal drainages to Stream Z, where it is conveyed north, traversing Wetlands X and P before eventually draining through a culvert offsite to the north. Wetland vegetation is dominated by salmonberry and youth-on-age. Hydric soil indicators A3 (Black Histic) and A4 (Hydrogen Sulfide Odor) were observed. The wetland boundary was delineated based on a transition to hydric soils. The onsite buffer is partially degraded due to the presence of a maintained power line ROW, but otherwise consists of relatively intact forest habitat. Wetland L is a Palustrine Scrub-Shrub, Temporarily Flooded and Seasonally Saturated (PSSAB) slope wetland.

Wetland M

Wetland M is 225 square feet (0.005 acre) in size onsite and located on centrally on the western boundary of the subject, west of Wetland L. Hydrology for Wetland M is provided by surface sheet flow from adjacent uplands, direct precipitation, and a seasonally high groundwater table. Wetland vegetation is dominated by salmonberry, ladyfern, and youth on age. Hydric soil indicators A4 (Hydrogen Sulfide) and F2 (Loamy Gleyed Matrix) were observed. The wetland boundary was delineated based on a transition to hydric soils and hydrology. The onsite buffer is partially degraded due to the presence of a maintained power line ROW, but otherwise consists of relatively intact forest habitat. Wetland M is a Palustrine Scrub-Shrub, Seasonally Saturated (PSSB) slope wetland.

Wetland N

Wetland N is 753 square feet (0.02 acre) in size onsite and located on the west-central portion of the subject property, west of Wetland D/H. Hydrology for Wetland N is provided by surface sheet flow

from adjacent uplands, direct precipitation, and a seasonally high groundwater table. Wetland vegetation is dominated by salmonberry, ladyfern, and youth on age. Hydric soil indicators A11 (Depleted Below Dark Surface) and F3 (Depleted Matrix) were observed. The wetland boundary was delineated based on a transition to hydric soils and hydrology. The onsite buffer consists of relatively intact forest habitat. Wetland N is a Palustrine Scrub-Shrub, Seasonally Saturated (PSSB) slope wetland.

Wetland O

Wetland O is 32,418 square feet (0.74 acre) in size onsite and located centrally on the western portion of the subject property, adjacent to Stream Y and South of Wetland B, west of Wetland D/H, and north of Wetland I. Hydrology for Wetland O is provided by surface sheet flow from adjacent uplands, direct precipitation, seasonally high groundwater table, and occasional flooding due to seeps discharging groundwater throughout the slope. Wetland vegetation is dominated by western red cedar, salmonberry, stink currant, western swordfern, youth on age, and ladyfern. Hydric soil indicators F1 (Loamy Mucky Mineral), F2 (Loamy Gleyed Matrix), and F3 (Depleted Matrix) were observed. The wetland boundary was delineated based on a transition to hydric soils and hydrology. The onsite buffer consists of relatively intact forest habitat. Wetland O is a Palustrine Forested and Scrub-Shrub, Temporarily Flooded and Seasonally Saturated (PFO/SSAB) slope wetland.

Wetland P

Wetland P is approximately 14,138 square feet (0.32 acre) in size onsite and located on western boundary of the subject property, adjacent to Streams X and Z, and north of Wetland X and west of Wetland G. Hydrology for Wetland P is provided by surface sheet flow from adjacent uplands, direct precipitation, and a seasonally high groundwater table. Hydrology from Wetland P is conveyed via a drainage and Stream Z north, where it is eventually conveyed through a culvert north offsite. Wetland vegetation is dominated by Pacific willow, Scouler's willow, salmonberry, stink currant, field horsetail, ladyfern, yellow skunk cabbage, youth on age, spreading wood fern (*Dryopteris expansa*) and non-native invasive Himalayan blackberry and reed canarygrass. Hydric soil indicators A11 (Depleted Below Dark Surface) and F6 (Redox Dark Surface) were observed. The wetland boundary was delineated based on a topographic drop and transition to hydric soils and hydrology. The onsite buffer is partially degraded due to historic land clearing and the encroachment of non-native invasive species. Wetland P is a Palustrine Forested and Scrub-Shrub, Temporarily and Seasonally Flooded (PFO/SSAC) depressional wetland.

Wetland Q

Wetland Q is 16,203 square feet (0.37 acre) in size onsite and located on the northeast portion of the subject property, north of Wetland F and west of Stream V. Wetland Q is significantly modified by ditching. Hydrology for Wetland Q is provided by surface sheet flow from adjacent uplands, direct precipitation, and a seasonally high groundwater table. Hydrology from Wetland Q is conveyed through an excavated ditch that eventually discharges to Stream V. Wetland vegetation is dominated by red alder, common velvetgrass, colonial bentgrass, and creeping buttercup. Hydric soil indicator F6 (Redox Dark Surface) was observed. The wetland boundary was delineated based on aerial imagery and a transition to hydrology and hydric soils. The onsite buffer is partially degraded due to land clearing, maintenance of the field, and the encroachment of non-native invasive species. Wetland Q is a Palustrine Forested and Scrub-Shrub and Emergent, Temporarily Flooded and Seasonally Saturated (PFO/SS/EMAB) depressional wetland.

Wetland R

Wetland R is 6,763 square feet (0.16 acre) in size onsite and located on the northeast portion of the subject property, adjacent to Stream V and west of Wetland V. Hydrology for Wetland R is provided by surface sheet flow from adjacent uplands, direct precipitation, and a seasonally high groundwater table. Hydrology from Wetland R is conveyed northwest via Stream V, which traverses Wetland 5 and Wetland S prior to being conveyed through a culvert north of the subject property. Wetland vegetation is dominated by salmonberry, stink currant, red elderberry (*Sambucus racemosa*), devil's club (*Oplopanax horridus*), youth on age, yellow skunk cabbage, ladyfern, and spreading wood fern. Hydric soil indicators A3 (Black Histic), A4 (Hydrogen Sulfide), A11 (Depleted Below Dark Surface), and F2 (Loamy Gleyed Matrix) were observed. The wetland boundary was delineated based on a transition to hydric soils and hydrology. The onsite buffer consists of relatively intact forest habitat. Wetland R is a Palustrine Scrub-Shrub, Seasonally Saturated (PSSB) slope wetland.

Wetland S

Wetland S is 23,085 square feet (0.53 acre) in size onsite and located on the northeast corner of the subject property, adjacent to Stream V and northwest of Wetland 5. Hydrology for Wetland S is provided by surface sheet flow from adjacent uplands, direct precipitation, and a seasonally high groundwater table. Hydrology from Wetland S is conveyed downslope through a drainage to Stream V. Wetland vegetation is dominated by western red cedar, salmonberry, and ladyfern. Hydric soil indicator F6 (Redox Dark Surface) was observed. The wetland boundary was delineated based on a transition to hydric soils. The onsite buffer is partially degraded by land clearing/residential development. Wetland S is a Palustrine Forested and Scrub-Shrub, Seasonally Saturated (PFO/SSB) slope wetland.

Wetland T

Wetland T is approximately 21,724 square feet (0.50 acre) in size onsite and located on the northwest corner of the subject property, west of Stream Z. Hydrology for Wetland T is provided by surface sheet flow from adjacent uplands, direct precipitation, and a seasonally high groundwater table. Hydrology from Wetland T is conveyed northeast through a drainage to Stream Z near the culvert that conveys Stream Z north offsite. Wetland vegetation is dominated by red alder, red osier dogwood, and willow (*Salix spp.*). Hydric soil indicator F6 (Redox Dark Surface) was observed. The wetland boundary was delineated based on a topographic drop and transition to hydric soils. The onsite buffer consists of relatively intact forest habitat, however the buffer is partially degraded due to the presence of the roadway and non-native invasive vegetation. Wetland T is a Palustrine Forested and Scrub-Shrub, Seasonally Saturated and Flooded (PFO/SSBC) depressional wetland.

Wetland U

Wetland U is 6,408 square feet (0.15 acre) in size and located on the southeast corner of the subject property. Hydrology for Wetland U is provided by surface sheet flow from adjacent uplands, direct precipitation, a seasonally high groundwater table, and inputs from offsite stormwater ponds associated with the residential development to the south of the southeast corner of the subject property. Wetland vegetation is dominated by Sitka spruce (*Picea sitchensis*), red alder, vine maple, salmonberry, and red osier dogwood. Hydric soil indicator F3 (*Depleted Matrix*) was observed. The wetland boundary was delineated based on a topographic drop, presence of wetland hydrology, and transition to hydric soils. The onsite buffer consists of relatively intact native forest habitat. Wetland

U is a Palustrine Forested and Scrub-Shrub, Temporarily and Seasonally Flooded (PFO/SSAC) depressional wetland.

Wetland V

Wetland V is 62,817 square feet (1.44 acre) in size onsite and located centrally on the southeast portion of the subject property. Hydrology for Wetland V is provided by surface sheet flow from adjacent uplands, direct precipitation, and a seasonally high groundwater table. Hydrology from Wetland V is conveyed northwest through an intermittent upland drainage that drains through a culvert to Stream Y. Wetland vegetation is dominated by salmonberry, vine maple, and youth on age; sparse black cottonwood, red alder, birch, Western red cedar, and Sitka spruce were present along the wetland boundary but often rooted outside of the wetland and providing canopy cover. Hydric soil indicators are presumed as a dark soil surface was present to a depth of 23 inches below ground surface (bgs), and indicator A12 (Thick Dark Surface) could not be ruled out. The wetland boundary was delineated based on a topographic drop and transition to hydrology and hydrophytic vegetation. The onsite buffer consists of relatively intact native forest habitat. Wetland V is a Palustrine Scrub-Shrub, Temporarily Flooded (PSSA) depressional wetland.

Wetland W

Wetland W is 12,539 square feet (0.29 acre) in size onsite and located adjacent to the eastern property boundary on the southeast portion of the subject property. Hydrology for Wetland W is provided by surface sheet flow from adjacent uplands, direct precipitation, and a seasonally high groundwater table. Wetland vegetation is dominated by red alder and salmonberry. Hydric soil indicator A11 (Depleted Below Dark Surface) was observed. The wetland boundary was delineated based on a topographic drop and transition to hydric soils and wetland hydrology. The onsite buffer consists of relatively intact forest habitat. Wetland W is a Palustrine Forested, Temporarily Flooded (PFOA) depressional wetland.

Wetland X

Wetland X is approximately 7,687 square feet (0.18 acre) in size and located on the western boundary of the subject property, west of Stream Z and south of Wetland P. Hydrology for Wetland X is provided by surface sheet flow from adjacent uplands, direct precipitation, and a seasonally high groundwater table. Hydrology from Wetland X is conveyed north via Stream Z, which traverses Wetland P before eventually draining through a culvert north offsite. Wetland vegetation is dominated by salmonberry, vine maple, and skunk cabbage. Due to its locations west of Stream Z and away from the location of potential future residential development activities, Wetland X was only preliminarily investigated; no formal data was collected, and the western boundary was estimated, Stream Z represents the eastern edge of the boundary. As such, hydric soils are presumed. The wetland boundary was estimated based on visual observations, LiDAR imagery, and topographic mapping resources. The onsite buffer consists of relatively intact forest habitat. Wetland X is a Palustrine Scrub-Shrub, Seasonally Saturated (PSSB) slope wetland.

Wetland Y

Wetland Y is approximately 8,296 square feet (0.19 acre) in size onsite and located on the northeast corner of the subject property, east of Stream V and southeast of Wetland R. Hydrology for Wetland Y is provided by surface sheet flow from adjacent uplands, direct precipitation, and a seasonally high groundwater table. Hydrology from Wetland Y is conveyed northeast via Stream V, which traverses

Wetland R, Wetland 5, and Wetland S prior to draining through a culvert north offsite. Wetland vegetation is dominated by red alder, Western red cedar, salmonberry, vine maple, skunk cabbage, and youth-on-age. Due to its locations east of Stream V and away from the location of potential future residential development activities, Wetland Y was only preliminarily investigated; no formal data was collected and the eastern boundary was estimated, Stream V represents the western edge of the boundary. As such, hydric soils are presumed. The wetland boundary was estimated based on visual observations, LiDAR imagery, and topographic mapping resources. The onsite buffer consists of relatively intact forest habitat. Wetland Y is a Palustrine Forested and Scrub-Shrub, Seasonally Saturated (PFO/SSB) slope wetland.

Wetland Z

Wetland Z is 2,057 square feet (0.05 acre) in size onsite and located on the southernmost portion of the subject property, south of Wetland A and north of offsite Wetland 6. Hydrology for Wetland Z is provided by surface sheet flow from adjacent uplands, direct precipitation, and a seasonally high groundwater table. Wetland vegetation is dominated by vine maple, salmonberry, and youth-on-age. Hydric soil indicator A11 (Depleted Below Dark Surface) was observed. The wetland boundary was delineated based on a topographic drop and a transition to two secondary indicators of wetland hydrology. The onsite buffer consists of relatively intact forest habitat. Wetland Z is a Palustrine Scrub-Shrub, Seasonally Saturated (PSSB) depressional wetland.

Wetland 1

Wetland 1 is approximately 1,030 square feet (0.02 acre) in size and was identified offsite, approximately 30 feet west of the southern portion of subject property at its closest point and west of Wetland A. Hydrology for Wetland 1 is provided by surface sheet flow from adjacent uplands, direct precipitation, and a seasonally high groundwater table. Wetland vegetation is dominated by non-native invasive reed canarygrass. Due to its offsite location, Wetland 1 was not formally assessed during the site investigation, and hydric soils are presumed. The wetland boundary was estimated based on visual observations made during the site investigation, LiDAR imagery, and topographic mapping resources. Wetland 1 is a Palustrine Emergent, Seasonally Flooded (PEMC) depressional wetland.

Wetland 2

Wetland 2 is approximately 2,842 square feet (0.07 acre) in size and was identified offsite, approximately 200 feet west of the northwest portion of the subject property at its closest point. Hydrology for Wetland 2 is provided by surface sheet flow from adjacent uplands, direct precipitation, and a seasonally high groundwater table. Wetland vegetation is dominated by soft rush (*Juncus effusus*) and bluegrass (*Poa spp.*). Due to its offsite location, Wetland 2 was not formally assessed during the site investigation, and hydric soils are presumed. The wetland boundary was estimated based on visual observations made during the site investigation, LiDAR imagery, and topographic mapping resources. Wetland 2 is a Palustrine Emergent, Seasonally Saturated (PEMB) slope wetland.

Wetland 3

Wetland 3 is approximately 44,148 square feet (1.01 acre) in size and was identified offsite, approximately 65 feet north of the northwest portion of the subject property at its closest point, north of Tviet Road. Hydrology for Wetland 3 is provided by surface sheet flow from adjacent uplands, direct precipitation, a seasonally high groundwater table, and Stream Z. Given that the wetland boundary located within a depression, it was rated as depressional rather than riverine. Hydrology

from Wetland 3 is conveyed north via Stream Z, which eventually drains to the Stillaguamish River. Vegetation appears to be dominated by red alder, black cottonwood, and willows. Due to its offsite location, Wetland 3 was not formally assessed during the site investigation, and hydric soils are presumed. The wetland boundary was estimated based on visual observations made during the site investigation, LiDAR imagery, and topographic mapping resources. Wetland 3 is a Palustrine Forested and Scrub-Shrub, Temporarily Flooded and Seasonally Saturated (PFO/SSAB) depressional wetland.

Wetland 4

Wetland 4 is approximately 9,501 square feet (0.22 acre) in size and was identified offsite, approximately 150 feet north of the northeast portion of the subject property at its closest point, north of Tviet Road. Hydrology for Wetland 4 is provided by surface sheet flow from adjacent uplands, direct precipitation, and a seasonally high groundwater table. Vegetation appears to be dominated by lawn grasses, herbaceous species, and forbs. Hydrology from Wetland 4 is conveyed northwest via Stream V, which eventually drains to Stream Z north of the subject property. Due to its offsite location, Wetland 4 was not formally assessed during the site investigation, and hydric soils are presumed. The wetland boundary was estimated based on visual observations made during the site investigation, LiDAR imagery, and topographic mapping resources. Wetland 4 is a Palustrine Emergent, Seasonally Saturated (PEMB) depressional wetland.

Wetland 5

Wetland 5 is approximately 17,449 square feet (0.40 acre) in size and was initially identified offsite, west of Stream V, southeast of Wetland S, and northeast of Wetland R. Following a survey of the property, Wetland 5 was determined to be onsite. Hydrology for Wetland 5 is provided by surface sheet flow from adjacent uplands, direct precipitation, and a seasonally high groundwater table. Hydrology from Wetland 5 is conveyed northwest via Stream Z, which traverses Wetland S prior to being conveyed through a culvert offsite to the north. Wetland vegetation is dominated by red alder, salmonberry, yellow skunk cabbage, and ladyfern. Due to the initial offsite location presumption, Wetland 5 was not formally assessed during the site investigation, and hydric soils are presumed. The wetland boundary was estimated based on visual observations made during the site investigation, LiDAR imagery, and topographic mapping resources. Wetland 5 is a Palustrine Forested and Scrub-Shrub, Seasonally Saturated (PFO/SSB) slope wetland.

Wetland 6

Wetland 6 is approximately 13,046 square feet (0.30 acre) in size and was identified offsite, adjacent to the southernmost boundary of the subject property and south of Wetland Z. Hydrology for Wetland 6 is provided by surface sheet flow from adjacent uplands, direct precipitation, and a seasonally high groundwater table. Vegetation appears to be dominated by scrub-shrub species including salmonberry and vine maple. Due to its offsite location, Wetland 6 was not formally assessed during the site investigation, and hydric soils are presumed. The wetland boundary was estimated based on visual observations made during the site investigation, LiDAR imagery, and topographic mapping resources. Wetland 6 is a Palustrine Scrub-Shrub, Seasonally Saturated (PSSB) depressional wetland.

Streams

Stream V

Stream V was identified on the northeast portion of the subject property and originates offsite to east. The stream flows west from offsite, crossing the eastern property boundary on the northeast corner of the site. Onsite, Stream V flows northwest on and adjacent to the northeast boundary of the subject property for 1,700 feet before being conveyed through a culvert north of the subject property underneath Tviet Road. North of Tviet Road, Stream V continues northwest, eventually draining to Stream Z. Stream V is situated in a steep ravine and has a defined bed and bank approximately 4 to 6 feet wide on average and receive hydrology from adjacent slope wetlands and several excavated ditches and drainages along its length. The stream flows down a slope with a gradient ranging from 7 to 9 percent. Stream substrate consists of sorted gravel and cobbles. The stream channel was dry during site investigations completed during October and early November 2023. Flowing water was observed throughout the length of the channel starting mid-November 2023 in response to the short, but elevated rainfall.

Snohomish County and DNR identify a Type F (fish-habitat) channel coinciding with Stream V. WDFW and the NWIFC do not identify any documented or presumed salmonid presence, and the WDFW Washington State Fish Passage Inventory identifies the culvert conveying Stream V beneath Tviet Road as a complete fish passage barrier due to a water surface drop (Site ID J033; Attachment B7). Stream V would not be regulated as a Type F-ESA water per AMC 20.93.700(a)(2) due to the lack of documented or presumed salmonid presences and the presence of a documented fish passage barrier along Tviet Road downstream of the subject property. However; as Stream V has a defined bed and bank greater than 2 feet wide on average, it meets the criteria of a Type F stream pursuant to WAC 222-16-030 and AMC 20.93.700(b).

Stream W

Stream W is a small channel that originates upslope/east of Stream Y, between flags Y-9 and Y-10 on the southwest portion of the subject property. The stream flows downslope through a linear channel for approximately 50 feet before draining to Stream Y. Stream W is characterized by an incised channel approximately 1 foot wide on average. Substrate consists of sorted gravels. No water was observed in the Stream W corridor during the October or early-November 2023 site investigations.

Stream W is not mapped by Snohomish County or DNR, and WDFW and the NWIFC do not identify any documented or presumed salmonid presence. As Stream W is less than 2 feet wide on average and lacked hydrology prior to mid-November 2023, it meets the criteria of a Type Ns (non-fish habitat, seasonal) water pursuant to WAC 222-16-030 and AMC 20.93.700(d).

Stream X

Stream X was identified on the west-central portion of the subject property and originates as a drainage seep upslope of Wetland E. The seep conveys hydrology downslope approximately 115 feet before forming the defined stream channel that characterizes Stream X in the southern portion of Wetland E. Stream X flows northwest for approximately 575 feet, traversing Wetland E and Wetland G before being conveyed through a culvert beneath a gravel access road. Beyond the access road, the stream flows west for an additional 185 feet before dissipating into a wetland drainage in Wetland P. The drainage lacks a defined bed or bank and flows north for approximately 160 feet before dissipating. No channel connecting Stream X to Stream Z was observed. Stream X receives hydrology from adjacent slope wetlands, hillside seeps, and several excavated ditches situated along its length. Water was observed within the lower reach of the channel during the initial August site investigation, as well as subsequent site visits in the fall and winter. Several distinct segments were observed along Stream X:

- From OHW flag X-1 to X-7, Stream X is characterized by a defined channel 1-2 feet wide on average and sorted cobbled/sand substrate. The channel is conveyed down a steep (24 percent) gradient.
- From OHW flag X-7 to X-10, Stream X transitions to a more gradual gradient and is characterized by a defined channel approximately 1 foot wide on average with sandy substrate.
- From OHW flag X-10 to X-16, Stream X flows through a ditched channel approximately 1 foot wide.
- From OHW flag X-16 to X-20, segments of Stream X still appear to be ditched, but the channel is much less incised and 1 foot wide on average.

Stream X is not mapped by Snohomish County or DNR, and the WDFW and the NWIFC do not identify documented or presumed salmonid presence. As Stream X is less than 2 feet wide on average, exhibits grades in excess of 20 percent, and lacks defined surface channel connectivity to Stream Z, it meets the criteria of a Type Np (non-fish habitat, perennial) stream pursuant to WAC 222-16-030 and AMC 20.93.700(d).

Stream Y

Stream Y was identified on the central/western portion of the subject property and originates as an undefined drainage that conveys hydrology from Wetland V through a culvert beneath a gravel access road on the southeast portion of the subject property. North of the access road, the drainage transitions to a defined channel that characterizes Stream Y. Stream Y generally flows to the northwest across the central and western portions of the subject property for 3,413 feet, traversing Wetlands D/H, I, O, B, and C prior to draining to Stream Z near the northwest corner of the subject property. Stream Y receives hydrology from Stream W, adjacent slope wetlands, and several hillside seeps/drainages situated along its length. Water was observed flowing in the lower reach of the stream during all of the site investigations. No water was observed in the upper reaches of Stream Y during the October or early-November site investigations, however, flows were observed in the upper reach beginning in mid-November in response to the short, but elevated rainfall. Several distinct segments were observed along Stream Y:

- From OHW flag Y-1a to Y-1k, Stream Y is characterized by a defined channel 1-2 feet wide on average with sorted sand/gravel substrate. The segment appears to go subsurface in several areas along its length, and large woody debris (LWD) and boulders were observed within the channel that may inhibit fish access. The stream segment flows down a steep (18 percent) gradient.
- From OHW flag Y-1k to Y-30, Stream Y is characterized by a defined channel 2-4 feet wide on average with sorted cobble, gravel, and sand substrate. The stream flows down a more gradual (6 percent) gradient. Large woody debris and small pool-riffle complexes were observed along this length.
- From OHW flag Y-30 to Y-34, Stream Y is characterized by a defined channel approximately 2 feet wide on average with sorted cobble/gravel substrate. The stream gradient steepens briefly (13 percent), and several cascades were observed. Large woody debris and boulders were observed along this length.
- From OHW flag Y-34 to Y-38, Stream Y is characterized by a defined channel approximately 2-3 feet wide on average with sorted cobble/gravel substrate and several pool-riffle complexes.
- From OHW flag Y-38 to Y-47, Stream Y is characterized by a defined channel approximately 2-3 feet wide and transitions to predominantly sand substrate with some cobble/gravel sorting. The stream gradient is more gradual, and it appears that the segment was previously ditched.

Snohomish County and DNR identify a stream coinciding with the Stream Y channel. Above OHW Flag Y-7, the stream is identified as a Type N (non-fish habitat) water. Below OHW Flag Y-7, the stream transitions to a Type F (fish-habitat) stream. WDFW and the NWIFC do not identify any documented or presumed salmonid presence; however, the WDFW PHS map identified occurrences of coho salmon coinciding with Stream Y. Additionally, Stream Y is a tributary to Stream Z, which has connectivity to the Stillaguamish River downstream of the subject property. No complete fish passage barriers are identified between Stream Y and the Stillaguamish River.

As portions of Stream Y upstream of OHW flag Y-1k are less than two feet wide on average, feature a gradient greater than 16 percent, and do not exhibit year-round flow, Stream Y upstream of OHW flag Y-1k meets the criteria of a Type Ns (non-fish habitat, seasonal) stream pursuant to WAC 222-16-030 and AMC 20.93.700(d). Portions of Stream Y downstream of OHW Flag Y-1k are greater than two feet wide on average, feature a gradient less than 16 percent, and have downstream connectivity to the Stillaguamish River through Stream Z, with no complete fish passage barriers. As such, Stream Y downstream of Flag Y-1k meets the criteria of a Type F-ESA (fish habitat with presumed presence of ESA-listed salmonids) water pursuant to WAC 222-16-030 and AMC 20.93.700(a)(2).

Stream Z

Stream Z was identified on the western portion of the subject property and originates as an undefined drainage upslope of Wetland J. The drainage traverses a majority of the wetland length and forms the defined stream channel that characterizes the start of Stream Z near northern portion of Wetland J. Stream Z flows north on/adjacent to the western portion of subject property for approximately 2,515 feet, traversing Wetlands K, L, X, and P prior to being conveyed offsite to the north through a culvert beneath Tviet Road. Beyond the road, Stream Z continues north, eventually draining to the Stillaguamish River. Stream Z receives hydrology from adjacent slope wetlands, hillside seeps/drainages, and one excavated ditch situated along its length. Water was observed flowing in the lower reach of the stream during all of the site investigations. No water was observed in the upper reaches of Stream Z during the October or early-November site investigations, however, flows were observed in the upper reach beginning in mid-November in response to the short, but elevated rainfall. Several distinct segments were observed along Stream Y

- From OHW flag Z-1 to Z-12, Stream Z is characterized by a defined channel 3-4 feet wide on average with sorted sand, gravel, and cobble substrate. The stream flows through a gradual (4 percent) gradient, and no habitat structures or pool-riffle complexes were observed.
- From OHW flag Z-12 to Z-21, Stream Z is characterized by a deeply incised channel approximately 4-6 feet wide on average with cobble and gravel substrate. A steep, 7-foot drop was observed at OHW flag Z-20, and the stream flows through a steep (16 percent) gradient. Large woody debris, large boulders, and pool-riffle complexes were observed.
- From OHW flag Z-21 to Z-25, Stream Z is characterized by a deeply incised channel 2-6 feet wide throughout its length. The channel features exposed bedrock and silt/clay substrate, and flows down a steep (18.5 percent) gradient.
- From OHW flag Z-26 to Z-32, Stream Z is characterized by defined channel 2-3 feet wide on average with sorted cobble/gravel substrate. The stream channel along this segment is less incised and flows down a gentler gradient.
- From OHW flag Z-32 to Z-39, Stream Z is characterized by an incised channel 3 to 4 feet wide on average with sand/silt substrate and no sorting.

Snohomish County and DNR identify a stream coinciding with Stream Z. Above OHW flag Z-11, the stream is identified as a Type N (non-fish habitat) water, and below OHW flag Z-11 the stream is identified as a Type F (fish-habitat) water. Two Type N tributaries are identified that converge into Stream Z; however only one channel was observed during the site investigation. WDFW and the NWIFC do not identify any documented or presumed salmonid presence; however, the WDFW PHS map identifies occurrences of coho salmon in a segment of Stream Z on the northwest corner of the subject property, and Stream Z connects to the Stillaguamish River downstream of the subject property. No complete fish passage barriers are identified between Stream Z onsite and the Stillaguamish River.

As Stream Z at OHW flag Z-20 features a steep (7-foot) drop that likely precludes fish access, and Stream Z from OHW flag Z-21 to Z-25 features a steep gradient greater than 16 percent and does not exhibit year-round flow, Stream Z upstream of OHW flag Z-25 likely meets the criteria of a Type Ns (non-fish habitat, seasonal) stream pursuant to WAC 222-16-030 and AMC 20.93.700(d). Portions of Stream Z downstream of OHW Flag Z-25 are greater than two feet wide on average, feature a gradient less than 16 percent, and have downstream connectivity to the Stillaguamish River, with no complete fish passage barriers. As such, Stream Z downstream of OHW flag Z-25 meets the criteria of a Type F-ESA (fish habitat with presumed presence of ESA-listed salmonids) water pursuant to WAC 222-16-030 and AMC 20.93.700(a)(2).

Fish and Wildlife Habitat

Per AMC 20.93.400, fish and wildlife habitat conservation areas include:

1. *Lands containing priority habitats and species, including plant and/or animal species listed on federal or state threatened or endangered species lists.*
2. *Ponds and their submerged aquatic beds that provide fish or wildlife habitat.*
 - A. *"Type S" waters of the state as defined in WAC 222-16-030, which includes all waters, within their ordinary high-water mark, as inventoried as "shorelines of the state" under Chapter 90.58 RCW and the rules promulgated pursuant to Chapter 90.58 RCW, but not including those waters' associated wetlands as defined in Chapter 90.58 RCW.*
3. *Segments of natural waters and periodically inundated areas of their associated wetlands that are used by salmonids for off-channel habitat. These areas are critical to the maintenance of optimum survival of juvenile salmonids. This habitat shall be identified based on the following criteria:*
 - A. *The site must be connected to a stream bearing salmonids and accessible during some period of the year; and*
 - B. *The off-channel water must be accessible to juvenile salmonids through drainage with less than a five percent gradient.*
4. *Lakes, ponds, and streams planted with game fish (defined at RCW 77.09.020), including those planted under the auspices of a federal, state, local, or tribal programs, or which support priority fish species as identified by the department of fish and wildlife.*
5. *State natural area preserves and natural resource conservation areas.*
6. *Habitats or species of local importance. Such habitats or species may be locally listed per the process elucidated in Section 20.93.420 (Species/habitats of local importance).*

Five streams (Streams V-Z) and twenty-four wetlands (Wetlands A-Y) were identified on the subject property. Streams V, Y, and Z meet the criteria of Type F (fish-habitat streams); however, a complete fish passage barrier is identified along Stream V at Tviet Road. Streams are generally protected under AMC 20.93 Part VI – *Streams, Creeks, Rivers, Lakes, and Other Surface Water*.

The WDFW PHS map identifies Stream Y and segments of Stream Z on the northwest corner of the subject property as priority habitat for coho salmon. The WDFW PHS map also identifies a wetland habitat area coinciding with Wetland Q; however, wetlands are protected under AMC 20.93 Part VII – *Wetlands*.

Stream Z and Stream Y both have downstream connectivity to the Stillaguamish River, which has documented occurrences of ESA-listed steelhead trout, bull trout, and Chinook salmon. No complete fish passage barriers are documented between the Stillaguamish River and the subject property, and segments of Stream Z and Stream Y appear meet the criteria of Type F-ESA (fish-habitat with presumed presence of ESA-listed salmonids) waters. Type F-ESA waters are subject to additional requirements outlined in AMC 20.93.440.

In addition to potential ESA-listed salmonids identified by WDFW and the NWIFC, the USFWS Information for Planning and Consultation (IPaC) resource identifies the potential for North American wolverine (*Gulo gulo luscus*), marbled murrelet (*Brachyramphus marmoratus*), and yellow-billed cuckoo (*Coccyzus americanus*) to occur within 300 feet of the subject property.

North American wolverines (*Gulo gulo luscus*) commonly occur in boreal forests and tundra ecosystems and in Washington they occupy alpine and subalpine forests within the North Cascades National Park and the wilderness areas of the Okanogan-Wenatchee National Forest where heavy snowpack persists well into the spring months (WDFW, n.d.). Population estimates vary between 20 to 35 individuals residing in Washington state. Wolverines will travel hundreds of miles when hunting and will consume a wide variety of foods including insects, berries, marmots, ground squirrels, snowshoe hares and other small mammals but they are predominantly scavengers of carrion of large animals. No areas meeting the habitat requirements for North American wolverines are present on or within 300 feet of the subject property.

Marbled murrelet that occurs in the state of Washington are year-round residents on coastal waters and primarily feed in waters within 500 feet of the shore out to 1.2 miles from shore at depths of less than one hundred feet. Potential suitable habitat typically consists of tree stands 5 or more acres in size composed of 60% or more conifer cover with minimum 15-inch diameter at breast height (DBH) with nesting platform trees. Nesting platform trees include “platform branches” that are a relatively flat surface at least four inches wide, at least 33 feet high in a coniferous tree, with cover from the live crown of the same tree or an adjacent tree (WSDOT, 2014). The subject property is located over 10 miles east of the Puget Sound, and no sightings of marbled murrelet have been documented on or within 300 feet of the subject property (eBird, n.d.). While the site is forested, forest stands typically consist of younger mixed conifer and deciduous species that likely do not provide suitable nesting habitat.

Yellow-billed cuckoo habitat consists of low to mid-level riparian forests dominated by cottonwoods and willows. Suitable habitat is approximately 100 to 198 acres and wider than 200 meters; marginal habitat is approximately 20 to 100 acres and 100 to 200 meters wide; and unsuitable habitat is smaller than approximately 37 acres and less than 100 meters wide (Wiles & Kalasz, 2017). Riparian habitat areas are present onsite; however, the riparian areas are generally dominated by evergreen species and non-preferred deciduous species such as red alder and big leaf maples, which are not suitable for yellow-billed cuckoo. Additionally, the most recent documented sighting of yellow-billed cuckoo in Snohomish County was in the Sultan area (approximately 25 miles southeast of the subject property) in 1997.

No lakes, ponds, or streams planted with game fish, state natural areas or preserves, or habitats or species of local importance are documented or were identified on or within 300 feet of the subject property. As such, the only fish and wildlife habitat conservation areas present on/within 300 feet of the subject property are Streams Y and Z.

Non-Regulated Features

Several likely non-regulated seeps, drainages, and excavated ditches were identified throughout the subject property.

Drainages associated with hillside seeps were numerous throughout the ravines onsite and were generally not mapped due to the number of seeps present. These seeps occurred both within wetlands and uplands, and generally were limited to areas with excessively steep slopes. In addition to hillside seeps, poorly defined wetland drainages were also observed immediately upgradient of Stream X, Y, and Z. In general, these areas were less than a foot wide, lacked a defined bed or bank, and appear to only convey occasional or ephemeral flows after periods of high precipitation. Due to the lack of a defined bed or bank, these areas do not meet the criteria to be regulated as streams per WAC 222-16-030 or AMC 20.93.100.

The ditches generally consist of linear channels that appear to have been artificially and intentionally constructed to support historical agricultural or forest practices, or convey surface runoff from roads or driveways. Ditches associated with gravel driveways ultimately drain into nearby streams or wetlands through natural drainages. Several of the ditches are situated entirely in uplands and appear to have been constructed during logging practices to convey runoff towards wetlands and streams. Additionally, extensive ditching was observed in Wetland Q, and several ditches were observed in Wetland G. Ditching is also evident in flatter portions of the maintained field. A ditch is present along the northern portion of the site paralleling Tveit Road. The ditch exhibits evidence of excavation and is choked with dense herbaceous and shrubby vegetation. No evidence of defined bed and bank or sorting is present, and the ditch only supports flows during and immediately following precipitation events.

Per AMC 20.93.100, streams do not include “*irrigation ditches, canals, stormwater runoff devices or other entirely artificial watercourses unless they are used to convey any stream naturally occurring prior to construction*”, and wetlands do not include “*those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway*”. Except for ditches situated within wetland boundaries, which are regulated as a part of the wetlands, the identified ditches appear to have been artificially and intentionally excavated from uplands, and do not appear to convey any naturally occurring stream channels. As such, the ditches do not meet the criteria to be regulated by the City of Arlington.

Regulatory Considerations

Local Considerations

Wetland Buffers

AMC 20.93.800(a) has adopted the current 2014 wetland rating system for western Washington (Hruby and Yahnke, 2023). Under the updated 2014 wetland rating system, Category IV wetlands have the lowest level of functions, scoring less than 16 points, and are often heavily disturbed. These

are wetlands that should be replaceable, and often can be improved. Category III wetlands are those that generally provide moderate levels of function, scoring between 16 and 19 points, and can often be replaced with a well-planned mitigation project. Category III wetlands have generally been disturbed in some ways and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands. Category II wetlands are difficult, though not impossible, to replace, and provide a moderately high level of functions. Category II wetlands score between 20 and 22 points.

Wetlands A, E, F, J-N, Q, R, T, V-X, 4, 5, and 6 are Category III wetlands with moderate habitat scores ranging from 6-7 points. Wetlands B, D/H, G, I, O, P, S, and Y are Category III wetlands with high habitat scores of 8 points. Wetlands C, U, and 3 are Category II wetlands with moderate habitat scores of 7 points. Wetland Z, 1, and 2 are Category IV wetlands with habitat scores ranging from 4 to 6 points.

Per AMC 20.93.830 Table 20.93-4, standard wetland buffers are based on wetland category and level of habitat functions. Category II and Category III wetlands with high habitat scores of 8-9 points are subject to a standard 225-foot buffer. Category II and Category III wetlands with moderate habitat scores of 6-7 points are subject to a standard 110-foot buffer. Category IV wetlands are subject to a standard 40-foot buffer regardless of habitat score. A wetland buffer summary is provided in Table 4 below.

Table 4. Wetland Buffer Summary.

Wetland	Category	Habitat Score	Standard Buffer Width (feet) ¹
A	III	6	150 ²
B	III	8	225
C	II	7	110
D/H	III	8	225
E	III	7	110
F	III	7	150 ²
G	III	8	225
I	III	8	225
J	III	7	110
K	III	7	110
L	III	7	110
M	III	7	110
N	III	7	110
O	III	8	225
P	III	8	225
Q	III	7	110
R	III	7	110
S	III	8	225
T	III	6	110
U	II	7	150 ²
V	III	7	110
W	III	6	150 ²
X	III	7	110
Y	III	8	225

Wetland	Category	Habitat Score	Standard Buffer Width (feet) ¹
Z	IV	6	40
1	IV	4	40
2	IV	5	40
3	II	7	110
4	III	6	110
5	III	7	110
6	III	6	110

1. Wetland buffer widths per AMC 20.93.830(a) Table 20.93-4 with implementation of minimization measures and vegetated corridors.
2. Wetland buffer widths per AMC 20.93.830 Table 20.93-6 due to inability to provide vegetated corridor.

Per AMC 20.93.830(a)(1) and (2), the standard buffer widths described in AMC 20.93.830 Table 20.93-4 require the implementation of measures to minimize the impacts of adjacent land uses described in AMC 20.93.830 Table 20.93-5 (Table 5 below). If these measures cannot be implemented, increased buffer widths outlined in AMC 20.93.830 Table 20.93-6 are required.

Per AMC 20.93.830(a)(1), wetlands scoring 6 or more points for habitat functions also require the establishment of a relatively undisturbed corridor at least 100 feet wide be protected between the wetland and:

- i. Any legally protected, relatively undisturbed vegetated areas (e.g., priority habitats, compensatory mitigation sites, wildlife areas/refuges, national, county, and state parks where they have management plans with identified areas designated as natural, natural forest, or natural areas preserves; or,
- ii. Areas that are the site of a watershed project identified within and fully consistent with a watershed plan; or
- iii. Areas where development is prohibited according to the provisions of the local shoreline master program; or
- iv. Areas with equivalent habitat quality that have a conservation status in perpetuity, in consultation with WDFW.

The corridor must be protected for the entire distance between the wetland and the shoreline or legally protected area by a conservation easement, deed restriction, or other legal site protection mechanism. If this corridor cannot be implemented, increased buffer widths outlined in AMC 20.93.830 Table 20.93-6 are required.

In general, 110-foot buffers increase to 150-foot buffer, 225-foot buffers increase to 300-foot buffers, and 40-foot buffers increase to 50-foot buffers. As Wetlands A, F, U and W currently lack the vegetated corridor required by AMC 20.93.830(a)(1), the buffers for these wetlands are increased from 110 feet to 150 feet. The remaining wetlands use the standard buffers described in AMC 20.93.830 Table 20.93-4.

Table 5. Required Measures to Minimize Impacts to Wetlands

Examples of disturbance	Examples of Activities and Uses that Cause Disturbance	Examples of measures to minimize impacts
Lights	<ul style="list-style-type: none"> •Parking lots •Warehouses •Manufacturing •Residential •Parks 	<ul style="list-style-type: none"> •Direct lights away from critical areas and buffers •Day use only regulations preventing the need for lights •Timer on lights
Noise	<ul style="list-style-type: none"> •Manufacturing •Residential 	<ul style="list-style-type: none"> •Locate activity that generates noise away from wetlands •If warranted, enhance existing buffer with native vegetation planting adjacent to noise source •For activities that generate relatively continuous, potentially disruptive noise, such as certain heavy industry or mining establish an additional 10 feet heavily vegetated buffer strip •Seasonal limitations on hours of operation
Toxic runoff	<ul style="list-style-type: none"> •Parking lots •Roads •Manufacturing •Residential areas •Application of agricultural pesticides •Landscaping 	<ul style="list-style-type: none"> •Route all new, untreated runoff away from wetland while ensuring wetland is not dewatered •Establish covenants limiting use of pesticides within 150 ft. of critical area or buffer •Apply integrated pest management
Stormwater runoff	<ul style="list-style-type: none"> •Parking lots •Roads •Manufacturing •Residential areas •Commercial •Landscaping 	<ul style="list-style-type: none"> •Retrofit stormwater detention and treatment for roads and existing adjacent development •Prevent channelized flow from lawns that directly enters the buffer •Use Low Intensity Development technique (for more information refer to the drainage manual)
Change in water regime	<ul style="list-style-type: none"> •Impermeable surfaces •Lawns •Tilling •Forest and forest duff removal 	<ul style="list-style-type: none"> •Infiltrate or treat, detain, and disperse into buffer new runoff from impervious surfaces and new lawns •Retain minimum forest and forest duff
Pets and human disturbance	<ul style="list-style-type: none"> •Residential areas •Parks 	<ul style="list-style-type: none"> •Use privacy fencing; plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion •Place wetland and its buffer in a separate tract or protect with a conservation easement
Dust	<ul style="list-style-type: none"> •Construction sites 	<ul style="list-style-type: none"> •Use best management practices to control dust
Disruption of corridors or connections	<ul style="list-style-type: none"> •Roads •Residential •Commercial •Manufacturing •Landscaping •Stormwater 	<ul style="list-style-type: none"> •Maintain connection to offsite areas that are undisturbed •Restore corridors or connections to offsite habitats by replanting

1. Measures to minimize wetland impacts per AMC 20.93.830(a) Table 20.93-5.

Stream Buffers

Stream V is classified as a Type F (fish habitat) water. Stream X is classified as a Type Np (non-fish habitat, perennial) water. Streams W, segments of Stream Y upstream of OHW flag Y-1k, and segments of Stream Z upstream of OHW flag Z-25 are classified as Type Ns (non-fish habitat, seasonal) waters. Segments of Stream Y downstream of OHW flag Y-1k and segments of Stream Z downstream of OHW flag Z-25 are classified as Type F-ESA (fish habitat with presumed presence of ESA-listed salmonids) waters.

Per AMC 20.93.730 Table 20.930-3, Type Np and Ns streams are subject to standard 50-foot buffers. Type F streams are subject to a standard 100-foot buffer. Type F-ESA streams are subject to a standard 150-foot buffer. A summary of stream buffers is provided in Table 5 below.

Table 5. Stream Buffer Summary.

Stream	Type	Standard Buffer Width (feet) ¹
V	F	100
W	Ns	50
X	Np	50
Y (Upstream of Y-1k)	Ns	50
Y (Downstream of Y-1k)	F-ESA	150
Z (Upstream of Z-25)	Ns	50
Z (Downstream of Z-25)	F-ESA	150

1. Stream buffer widths per AMC 20.93.730 Table 20.93-3.

Building Setback

Per AMC 20.93.340, an additional 15-foot building setback is required from the edge of all critical area buffers.

Abbreviated State and Federal Considerations

All of the identified wetlands and streams are likely regulated by the WSDOE as natural surface waters under the Revised Code of Washington (RCW) 90.48.

Stream Z is a tributary to the Stillaguamish River, a traditional navigable water and regulated Water of the United States (WOTUS). All of the onsite streams, a majority of the onsite wetlands, and offsite Wetlands 3 and 4 are situated adjacent to and have continuous surface water connectivity to the identified streams. As such, these waters all likely meet the criteria of WOTUS and are likely regulated by the USACE under Section 404 of the Clean Water Act (CWA).

Wetlands A, F, M, N, U, W, Z and offsite Wetlands 1, 2, and 6 are isolated features that lack a surface water connection to onsite nearby streams. As such, these waters do not appear to meet the criteria of WOTUS and are not likely regulated by the USACE under Section 404 of the CWA. Additionally, Wetland Q connects to Stream V via an excavated ditch that only conveys hydrology following high precipitation events. As such, Wetland Q does not likely have a continuous surface water connection to Stream V and is not likely regulated. However, an Approved Jurisdictional Determination (AJD) from USACE would be required to confirm presence or absence of federal jurisdiction over a wetland or waterbody.

A summary of the state and federal regulatory status of the identified waters is provided in Table 6 below.

Table 6. State and Federal Regulatory Status of Onsite Waters

Waterbody Name	Regulated Under RCW 90.48	Regulated Under Section 404 of the CWA
Wetland A	Yes	Not Likely
Wetland B	Yes	Likely
Wetland C	Yes	Likely
Wetland D/H	Yes	Likely
Wetland E	Yes	Likely
Wetland F	Yes	Not Likely
Wetland G	Yes	Likely
Wetland I	Yes	Likely
Wetland J	Yes	Likely
Wetland K	Yes	Likely
Wetland L	Yes	Likely
Wetland M	Yes	Not Likely
Wetland N	Yes	Not Likely
Wetland O	Yes	Likely
Wetland P	Yes	Likely
Wetland Q	Yes	Not Likely
Wetland R	Yes	Likely
Wetland S	Yes	Likely
Wetland T	Yes	Likely
Wetland U	Yes	Not Likely
Wetland V	Yes	Likely
Wetland W	Yes	Not Likely
Wetland X	Yes	Likely
Wetland Y	Yes	Likely
Wetland Z	Yes	Not Likely
Wetland 1	Yes	Not Likely
Wetland 2	Yes	Not Likely
Wetland 3	Yes	Likely
Wetland 4	Yes	Likely
Wetland 5	Yes	Likely
Wetland 6	Yes	Not Likely
Stream V	Yes	Likely
Stream W	Yes	Likely
Stream X	Yes	Likely
Stream Y	Yes	Likely
Stream Z	Yes	Likely

If a future project requires direct wetland impacts, authorization will be sought from the City, WSDOE, and USACE, and necessary code analytics and mitigation will be provided under separate cover.

Conclusions

SVC identified 26 wetlands (Wetlands A-Z and 5) and five streams (Streams V-Z) on the subject property. In addition, five wetlands (Wetlands 1-4 and 6) were identified offsite within 300 feet of the subject property. Wetlands A, E, F, J-N, Q, R, T, V-X, and 4-6 are Category III wetlands with moderate habitat scores and subject to standard 110-foot buffers. Wetlands B, D/H, G, I, O, P, S, and Y are Category III wetlands with high habitat scores and subject to standard 225-foot buffers. Wetlands C, U, and 3 are Category II wetlands with moderate habitat scores and subject to standard 110-foot buffers. Wetlands Z, 1, and 2 are Category IV wetlands and subject to standard 40-foot buffers.

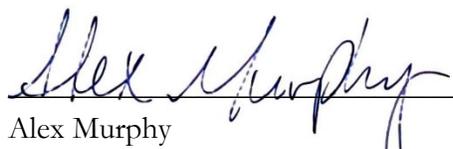
Streams V is classified as a Type F (fish habitat) stream and subject to a standard 100-foot buffer. Stream X is classified as a Type Np (non-fish habitat, perennial) stream and subject to a standard 50 foot buffer. Streams W, Segments of Stream Y upstream of OHW flag Y-1k, and segments of Stream Z upstream of OHW flag Z-25 are classified as Type Ns (non-fish habitat, seasonal) streams and subject to standard 50-foot buffers. Segments of Stream Y downstream of OHW flag Y-1k and segments of Stream Z downstream of OHW flag Z-25 are classified as Type F-ESA (fish habitat with presumed presence of ESA-listed salmonids) streams and subject to standard 150-foot buffers.

An additional 15-foot building setback is required from the edge of all critical area buffers. No other potentially regulated wetlands or fish and wildlife habitat conservation areas were identified on or within 300 feet of the subject property.

The outermost boundaries of Wetlands P, T, X, Y, and 5 were estimated based on visual observations and topography as they are not expected to project boundaries into the proposed development area. If future development expands onto portions of the site encumbered by these areas, additional site investigations may be required to collect formal data and delineate these areas.

If you have questions, please contact us at your earliest convenience.

Sincerely,



Alex Murphy
Project Manager/Senior Environmental Planner

February 19, 2025

Date

References

- Anderson, P.S., Meyer, S., Olson, P, and Stockdale, E. 2016. *Determining the Ordinary High Water Mark for Shoreline Management Act Compliance in Washington State*. Publication No. 16-06-029. Final Review Draft. Shorelands and Environmental Assistance Program, Washington State Department of Ecology. Olympia, Washington.
- Arlington Municipal Code (AMC). 2023. *Chapter 20.93 – Critical Areas Ordinance*. Website: https://library.municode.com/wa/arlington/codes/code_of_ordinances?nodeId=TTT20Z_O_CH20.93CRAROR. Current through August 28, 2023.
- Conservation Northwest. N.d. *Wolverine*. Website: <https://conservationnw.org/our-work/wildlife/wolverine/>. Accessed December 2023.
- Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*. Technical Report Y-87-1, US Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.
- Federal Geographic Data Committee. 2013. *Classification of Wetlands and Deepwater Habitats of the United States*. FGDC-STD-004-2013. Second Edition. Wetlands Subcommittee, Federal Geographic Data Committee and U.S. Fish and Wildlife Service, Washington, DC.
- Hitchcock, C.L. & A. Cronquist, Ed. by D. Giblin, B. Ledger, P. Zika, and R. Olmstead. 2018. *Flora of the Pacific Northwest, 2nd Edition*. U.W Press and Burke Museum. Seattle, Washington.
- Hruby, T. & Yahnke, A. 2023. *Washington State Wetland Rating System for Western Washington: 2014 Update (Version 2)*. Washington State Department of Ecology Publication #23-06-009.
- Munsell® Color. 2000. *Munsell® soil color charts*. New Windsor, New York.
- Natural Resources Conservation Services (NRCS). N.d. *Soil Data Access Hydric Soils List* (Soil Data Access Live). Website: https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd1316620.html.
- NRCS. 2018. *Field Indicators of Hydric Soils in the United States, Version 8.2*. L.M. Vasilas, G.W. Hurt, and J.F. Berkowitz (eds.). USDA, NRCS, in cooperation with the National Technical Committee for Hydric Soils.
- Supreme Court of the United States. *Sackett Et Ux. V Environmental Protection Agency Et Al*. May 25, 2023. <https://www.epa.gov/system/files/documents/2023-05/Sackett%20Opinion.pdf>.
- USACE. 2010. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)*, ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-10-3. Vicksburg, MS: U.S. Army Engineer Research and Development Center. Vicksburg, Mississippi.
- USACE and Environmental Protection Agency (EPA). 2023a. “Revised Definition of Waters of the United States.” 88 FR 3004. January 18, 2023.
- USACE and EPA. 2023b. Revised Definition of “Waters of the United States”, Conforming Final Rule. Federal Register. Volume 88, Number 173 (33 CFR Part 328, 40 CFR Part 120). September 8, 2023.

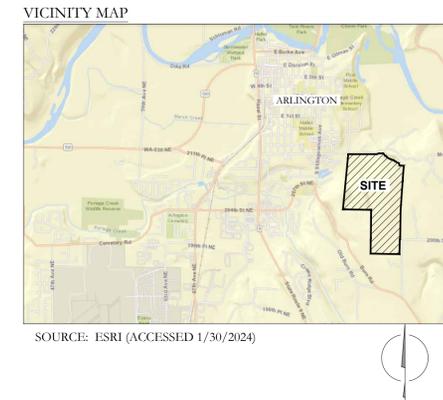
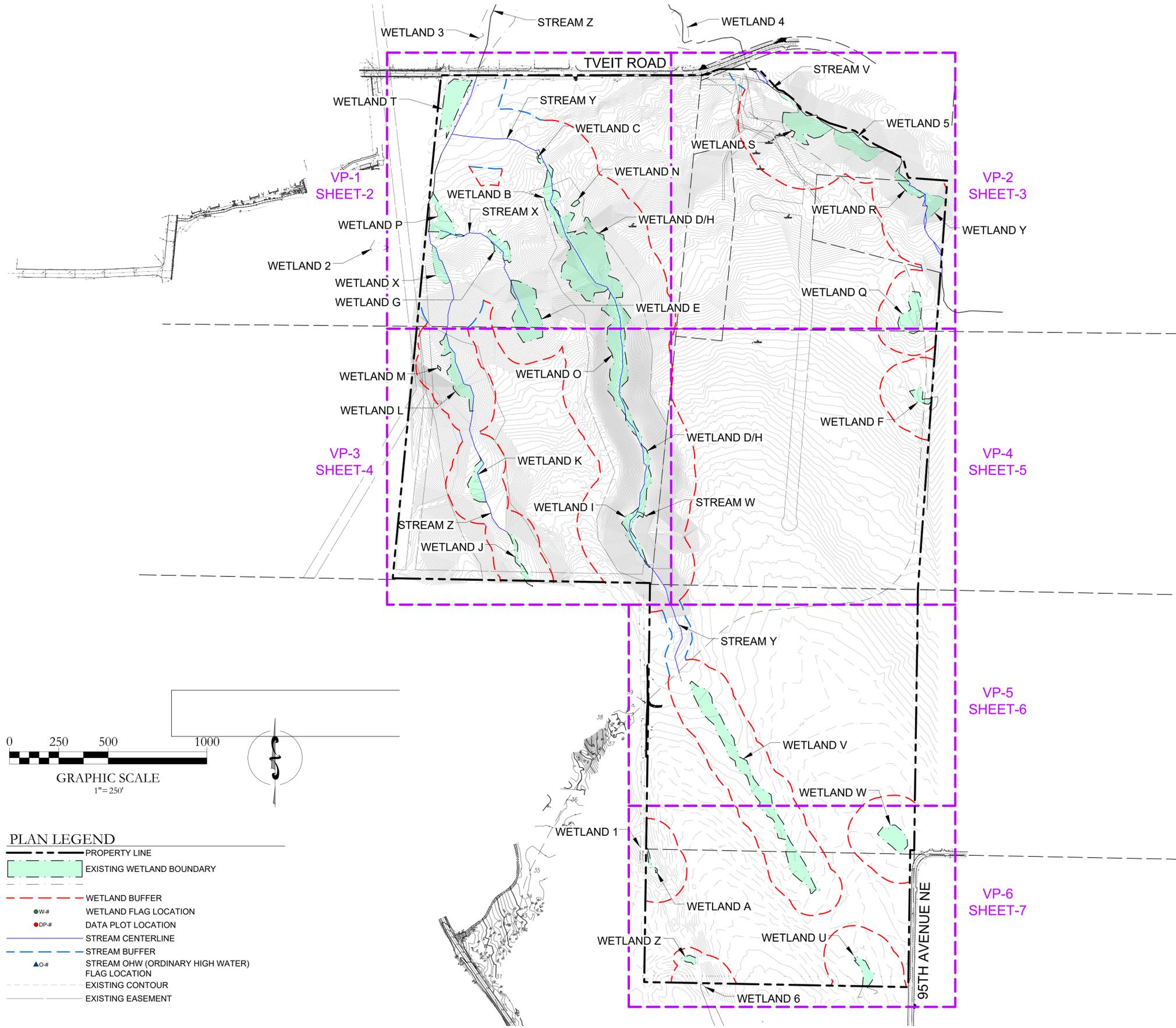
USACE. 2020. *National Wetland Plant List, version 3.5*. <http://wetland-plants.usace.army.mil/>

Washington State Department of Transportation. 2014. “Appendix H: Site Evaluation and Effect Determination Criteria – Marbled Murrelet.”

Washington State Department of Fish and Wildlife (WDFW). N.d. Wolverine. Website: <https://wdfw.wa.gov/species-habitats/species/gulo-gulo-luscus>. Date accessed: September 10, 2019.

Wiles, G.J. and K.S. Kalasz, 2017. *Washington State Status Report for the yellow-billed cuckoo*. Washington Department of Fish and Wildlife. May 2017.

Attachment A – Existing Conditions Exhibit



LOCATION
 THE NE, SE, & SW ¼ OF SECTIONS 12 & 13,
 TOWNSHIP 31N, RANGE 5E, WM

APPLICANT/OWNER
 NAME: ARLINGTON 360, LLC
 ADDRESS: 10515 20TH STREET SE, SUITE 202
 LAKE STEVENS, WA 98358
 CONTACT: RYAN C. LARSEN
 PHONE: (360) 631-1820
 E-MAIL: RLARSEN@LANDPROGRP.COM

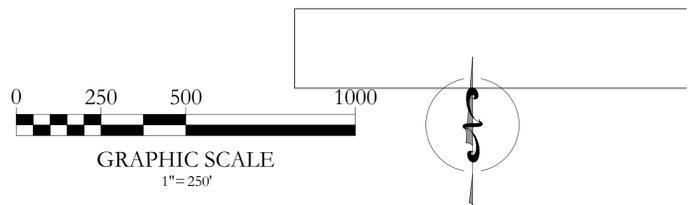
ENVIRONMENTAL CONSULTANT
 SOUNDVIEW CONSULTANTS LLC
 2907 HARBORVIEW DRIVE
 GIG HARBOR, WA 98355
 (253) 514-8952

SOURCES:

Soundview Consultants LLC
 Environmental Assessment • Planning • Land Use Solutions
 2907 HARBORVIEW DRIVE
 GIG HARBOR, WASHINGTON 98335
 WWW.SOUNDVIEWCONSULTANTS.COM
 P: 253.514.8952
 F: 253.514.8954

SHEET INDEX

SHEET NUMBER	SHEET TITLE
1	EXISTING CONDITIONS OVERVIEW
2	EXISTING CONDITIONS - VIEWPORT 1
3	EXISTING CONDITIONS - VIEWPORT 2
4	EXISTING CONDITIONS - VIEWPORT 3
5	EXISTING CONDITIONS - VIEWPORT 4
6	EXISTING CONDITIONS - VIEWPORT 5
7	EXISTING CONDITIONS - VIEWPORT 6

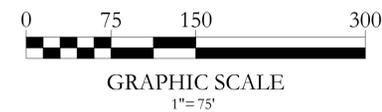
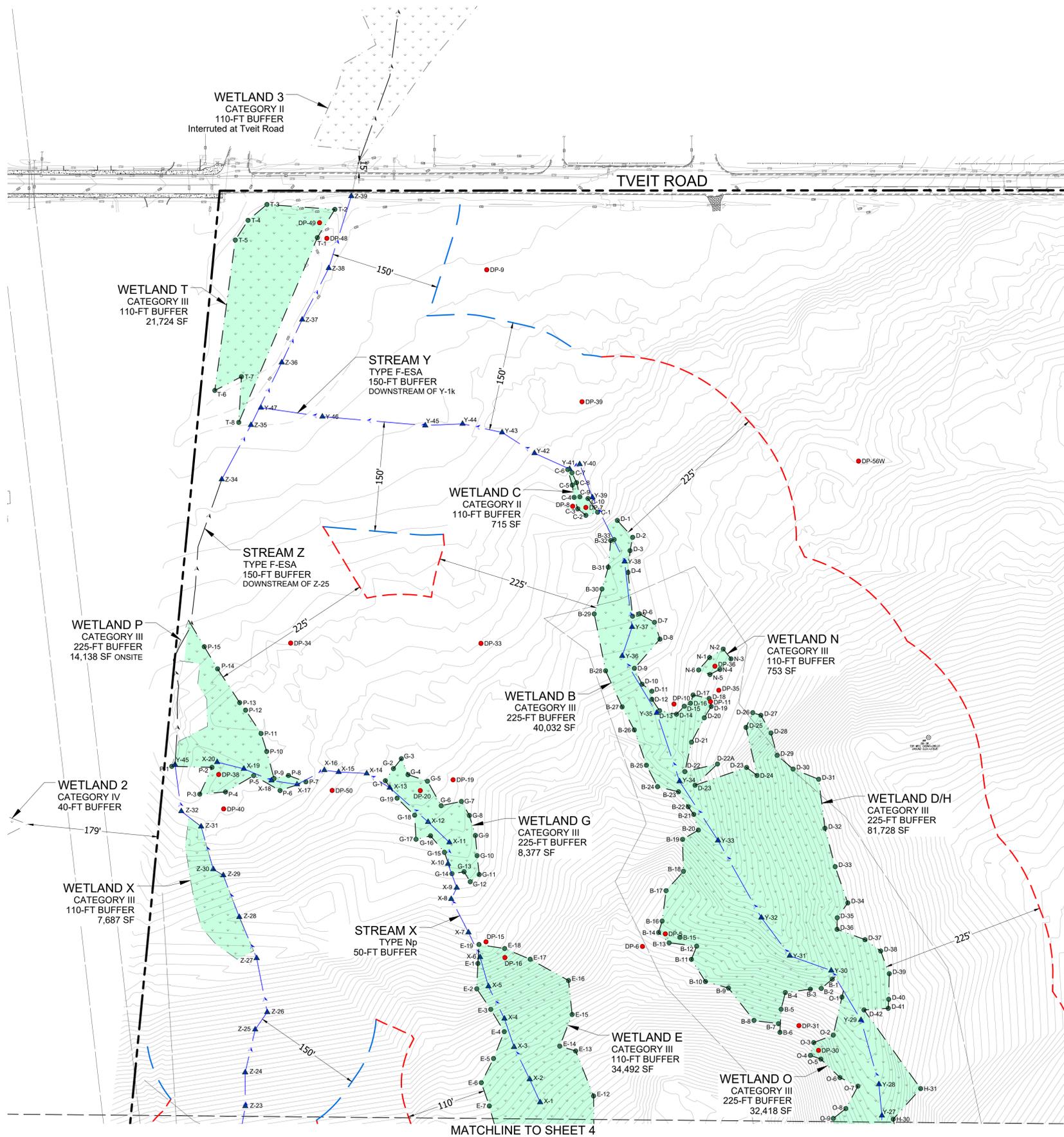


- PLAN LEGEND**
- PROPERTY LINE
 - EXISTING WETLAND BOUNDARY
 - - - WETLAND BUFFER
 - W-# WETLAND FLAG LOCATION
 - DP-# DATA PLOT LOCATION
 - STREAM CENTERLINE
 - - - STREAM BUFFER
 - ▲ O-# STREAM OHW (ORDINARY HIGH WATER) FLAG LOCATION
 - - - EXISTING CONTOUR
 - - - EXISTING EASEMENT

ARLINGTON EAST HILL
 8904, 9104, 9110, & 9116 TVEIT ROAD,
 ARLINGTON, WA 98223
 SNOHOMISH COUNTY
 PARCEL NUMBER(S):
 31051200400200, 31051200401000, 31050200402300,
 31051200400400, 31051300100200, 3105300100300,
 31051200300100, & 31051200300500

DATE: 10/30/2024
 JOB: 2376.0008
 BY: MW
 SCALE: AS SHOWN
 SHEET: 1

C:\Users\Donna\AppData\Local\Temp\2024-10-30\2376.0008_Arlington_East_Hill_Graphics & Maps\CADD - CURRENT SV_BROWNSVA - CURRENT Issue DWG\2376.0008_1024-10-30_harr.dwg
 Plotted October 30, 2024



- PLAN LEGEND**
- PROPERTY LINE
 - EXISTING WETLAND BOUNDARY
 - - - APPROXIMATED WETLAND BOUNDARY (NOT SURVEYED)
 - - - WETLAND BUFFER
 - W-# WETLAND FLAG LOCATION
 - DP-# DATA PLOT LOCATION
 - STREAM CENTERLINE
 - - - APPROXIMATED STREAM CENTERLINE (NOT SURVEYED)
 - STREAM BUFFER
 - ▲ O-# STREAM OHW (ORDINARY HIGH WATER) FLAG LOCATION
 - - - EXISTING CONTOUR
 - - - EXISTING EASEMENT

MATCHLINE TO SHEET 3

MATCHLINE TO SHEET 4

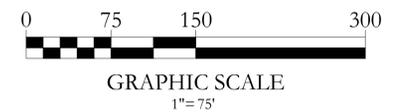
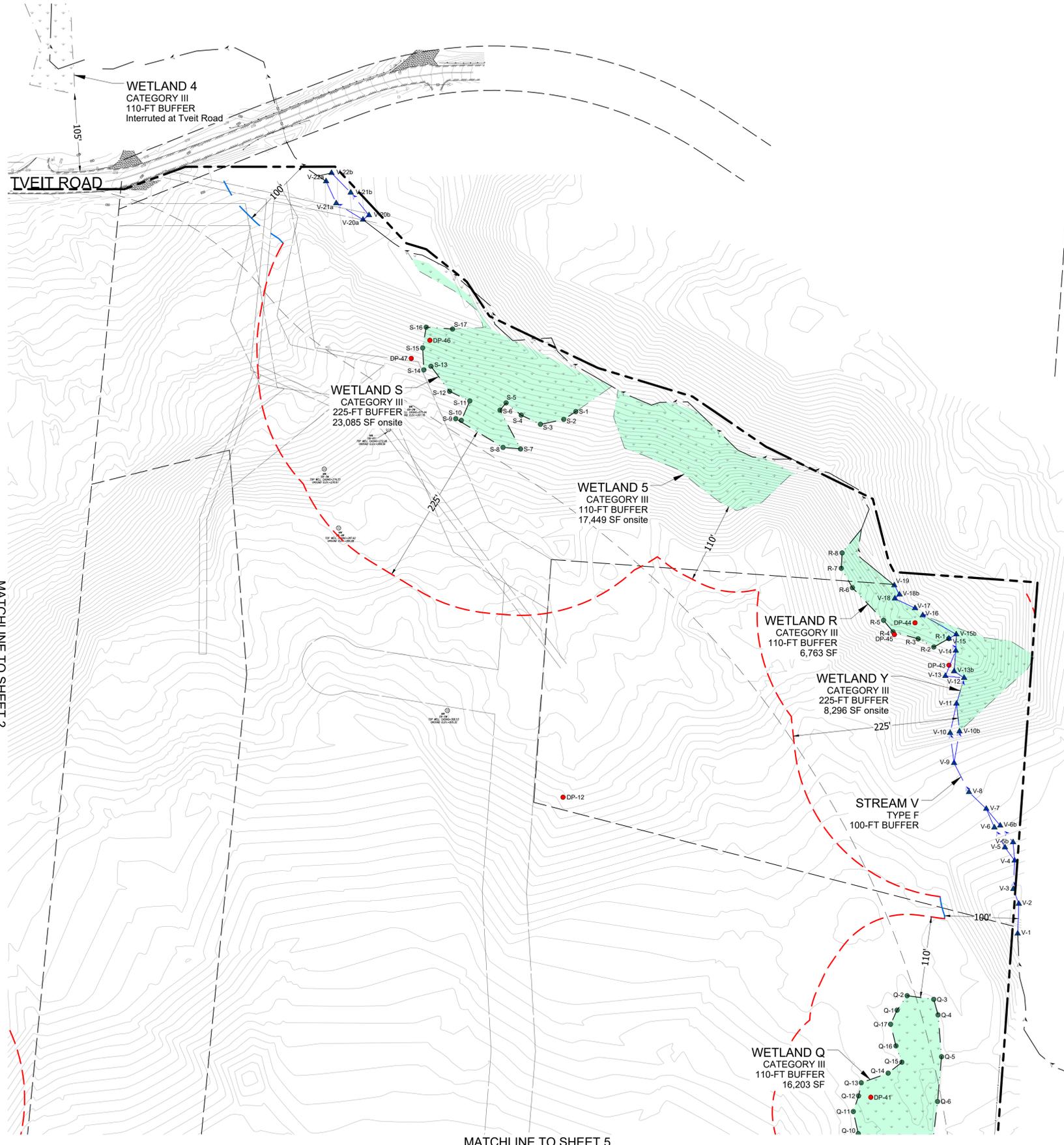
SOURCES:

Soundview Consultants LLC
 Environmental Assessment • Planning • Land Use Solutions
 P. 253.514.8952
 F. 253.514.8954
 WWW.SOUNDVIEWCONSULTANTS.COM

ARLINGTON EAST HILL
 8904, 9104, 9110, & 9116 TVEIT ROAD,
 ARLINGTON, WA 98223
 SNOHOMISH COUNTY
 PARCEL NUMBER(S):
 31051200400200, 31051200401000, 31051200402300,
 31051200404000, 31051300100200, 3105300100300,
 31051200300100, & 31051200300500

DATE: 10/30/2024
 JOB: 2376.0008
 BY: MW
 SCALE: AS SHOWN
 SHEET: 2

C:\Users\Donna\AppData\Local\Temp\20241030\2376.0008\Arlington_East_Hill_Graphics.mxd - CURRENT SV: BAWMS24VA - Current Issue: 09/26/2024 (10:30) haw.dwg
 Plotted: October 30, 2024



- PLAN LEGEND**
- PROPERTY LINE
 - EXISTING WETLAND BOUNDARY
 - - - APPROXIMATED WETLAND BOUNDARY (NOT SURVEYED)
 - - - WETLAND BUFFER
 - W.# WETLAND FLAG LOCATION
 - DP.# DATA PLOT LOCATION
 - STREAM CENTERLINE
 - - - APPROXIMATED STREAM CENTERLINE (NOT SURVEYED)
 - - - STREAM BUFFER
 - ▲ O.# STREAM OHW (ORDINARY HIGH WATER) FLAG LOCATION
 - - - EXISTING CONTOUR
 - - - EXISTING EASEMENT

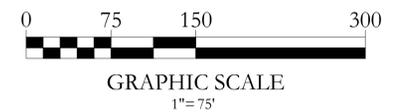
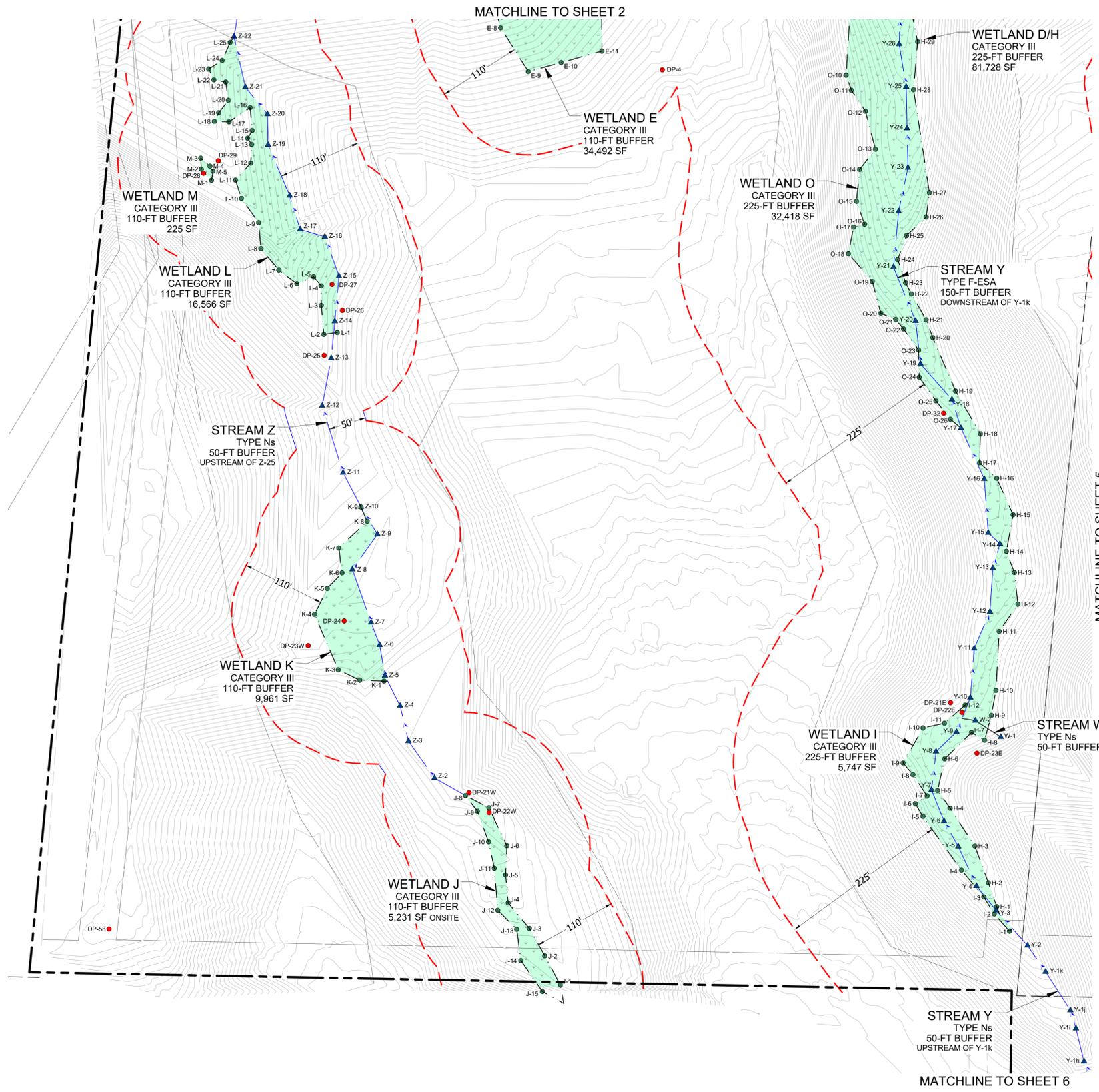
SOURCES:

Soundview Consultants LLC
 Environmental Assessment • Planning • Land Use Solutions
 2907 HARBORVIEW DRIVE
 GIG HARBOR, WASHINGTON 98335
 P. 253.514.8952
 F. 253.514.8954
 WWW.SOUNDVIEWCONSULTANTS.COM

ARLINGTON EAST HILL
 8904, 9104, 9110, & 9116 TVEIT ROAD,
 ARLINGTON, WA 98223
 SNOHOMISH COUNTY
 PARCEL NUMBER(S):
 31051200400200, 31051200401000, 31050200402300,
 31051200404000, 31051300100200, 3105300100300,
 31051200300100, & 31051200300500

DATE: 10/30/2024
 JOB: 2376.0008
 BY: MW
 SCALE: AS SHOWN
 SHEET: 3

C:\Users\Donna\AppData\Local\Temp\2376_0008_Arlington_East_Hill_Graphics & Maps\CADVA - CURRENT SVT_BROWNSVA - Current Base DWG\2376_0008_1024-10-30_brow.dwg
 Plotted October 30, 2024



- PLAN LEGEND**
- — — — — PROPERTY LINE
 - ▭ EXISTING WETLAND BOUNDARY
 - - - - - APPROXIMATED WETLAND BOUNDARY (NOT SURVEYED)
 - - - - - WETLAND BUFFER
 - W.# WETLAND FLAG LOCATION
 - DP.# DATA PLOT LOCATION
 - — — — — STREAM CENTERLINE
 - - - - - APPROXIMATED STREAM CENTERLINE (NOT SURVEYED)
 - — — — — STREAM BUFFER
 - ▲ O.# STREAM OHW (ORDINARY HIGH WATER) FLAG LOCATION
 - - - - - EXISTING CONTOUR
 - — — — — EXISTING EASEMENT

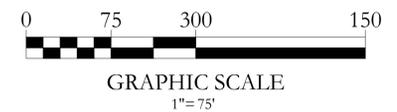
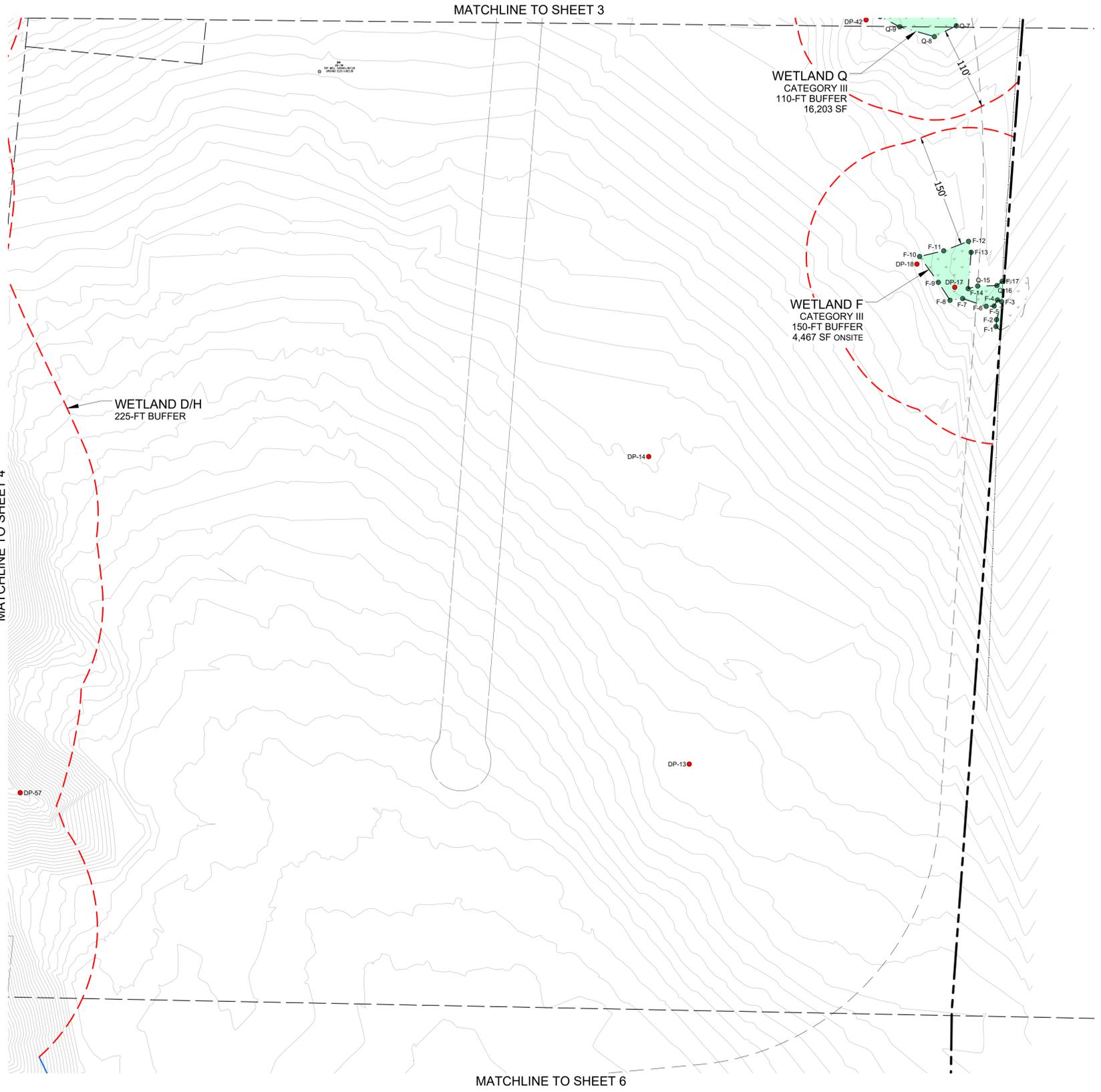
SOURCES:

Soundview Consultants LLC
Environmental Assessment • Planning • Land Use Solutions
2907 HARBORVIEW DRIVE
GIG HARBOR, WASHINGTON 98335
P. 253.514.8952
F. 253.514.8954
WWW.SOUNDVIEWCONSULTANTS.COM

ARLINGTON EAST HILL
8904, 9104, 9110, & 9116 TWEIT ROAD,
ARLINGTON, WA 98223
SNOHOMISH COUNTY
PARCEL NUMBER(S):
31051200400200, 31051200401000, 310520200402300,
31051200400400, 31051300100200, 3105300100300,
31051200300100, & 31051200300500

DATE: 10/30/2024
JOB: 2376.0008
BY: MW
SCALE: AS SHOWN
SHEET: 4

C:\Users\Donna\OneDrive\COMPANY\CURRENT\2376 JM Holdings LLC - e- Land Pro Group\2376.0008 Arlington East Hill\Graphics & Maps\CADD - CURRENT\2376.0008 - Current Issue\2376.0008 (2024-10-30) base.dwg
Printed October 30, 2024



PLAN LEGEND

	PROPERTY LINE
	EXISTING WETLAND BOUNDARY
	APPROXIMATED WETLAND BOUNDARY (NOT SURVEYED)
	WETLAND BUFFER
	WETLAND FLAG LOCATION
	DATA PLOT LOCATION
	STREAM CENTERLINE
	APPROXIMATED STREAM CENTERLINE (NOT SURVEYED)
	STREAM BUFFER
	STREAM OHW (ORDINARY HIGH WATER) FLAG LOCATION
	EXISTING CONTOUR
	EXISTING EASEMENT

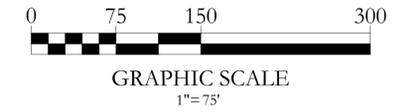
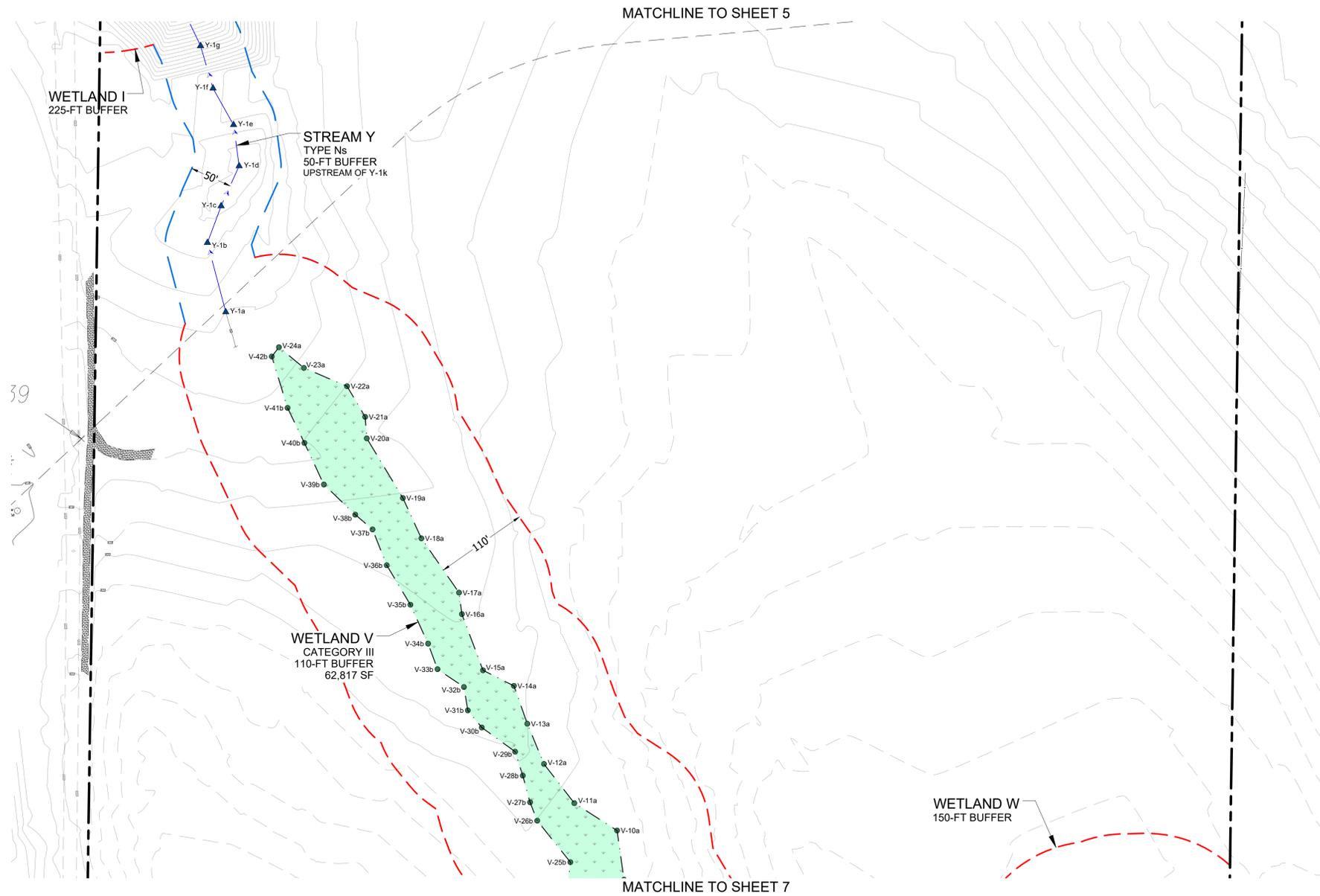
SOURCES:

Soundview Consultants LLC
 Environmental Assessment • Planning • Land Use Solutions
 2907 HARBORVIEW DRIVE
 GIG HARBOR, WASHINGTON 98335
 P: 253.514.8952
 F: 253.514.8954
 WWW.SOUNDVIEWCONSULTANTS.COM

ARLINGTON EAST HILL
 8904, 9104, 9110, & 9116 TWEIT ROAD,
 ARLINGTON, WA 98223
 SNOHOMISH COUNTY
 PARCEL NUMBER(S):
 31051200400200, 31051200401000, 31050200402300,
 31051200404000, 31051300100200, 3105300100300,
 31051200300100, & 31051200300500

DATE: 10/30/2024
 JOB: 2376.0008
 BY: MW
 SCALE: AS SHOWN
 SHEET: 5

C:\Users\Donna\OneDrive\COMPANY\CURRENT\2376 JM Holdings LLC - c-m Land Pro Group\2376.0008 Arlington East Hill\Graphics & Maps\CADD - CURRENT\SV_BROWNSVA - CURRENT\Map\2376.0008 (2024-10-30) harr.dwg
 Plotted October 30, 2024



PLAN LEGEND

- PROPERTY LINE
- EXISTING WETLAND BOUNDARY
- APPROXIMATED WETLAND BOUNDARY (NOT SURVEYED)
- WETLAND BUFFER
- W-# WETLAND FLAG LOCATION
- DP-# DATA PLOT LOCATION
- STREAM CENTERLINE
- APPROXIMATED STREAM CENTERLINE (NOT SURVEYED)
- STREAM BUFFER
- AO-# STREAM OHW (ORDINARY HIGH WATER) FLAG LOCATION
- EXISTING CONTOUR
- EXISTING EASEMENT

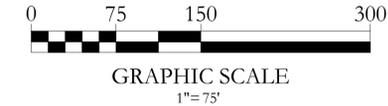
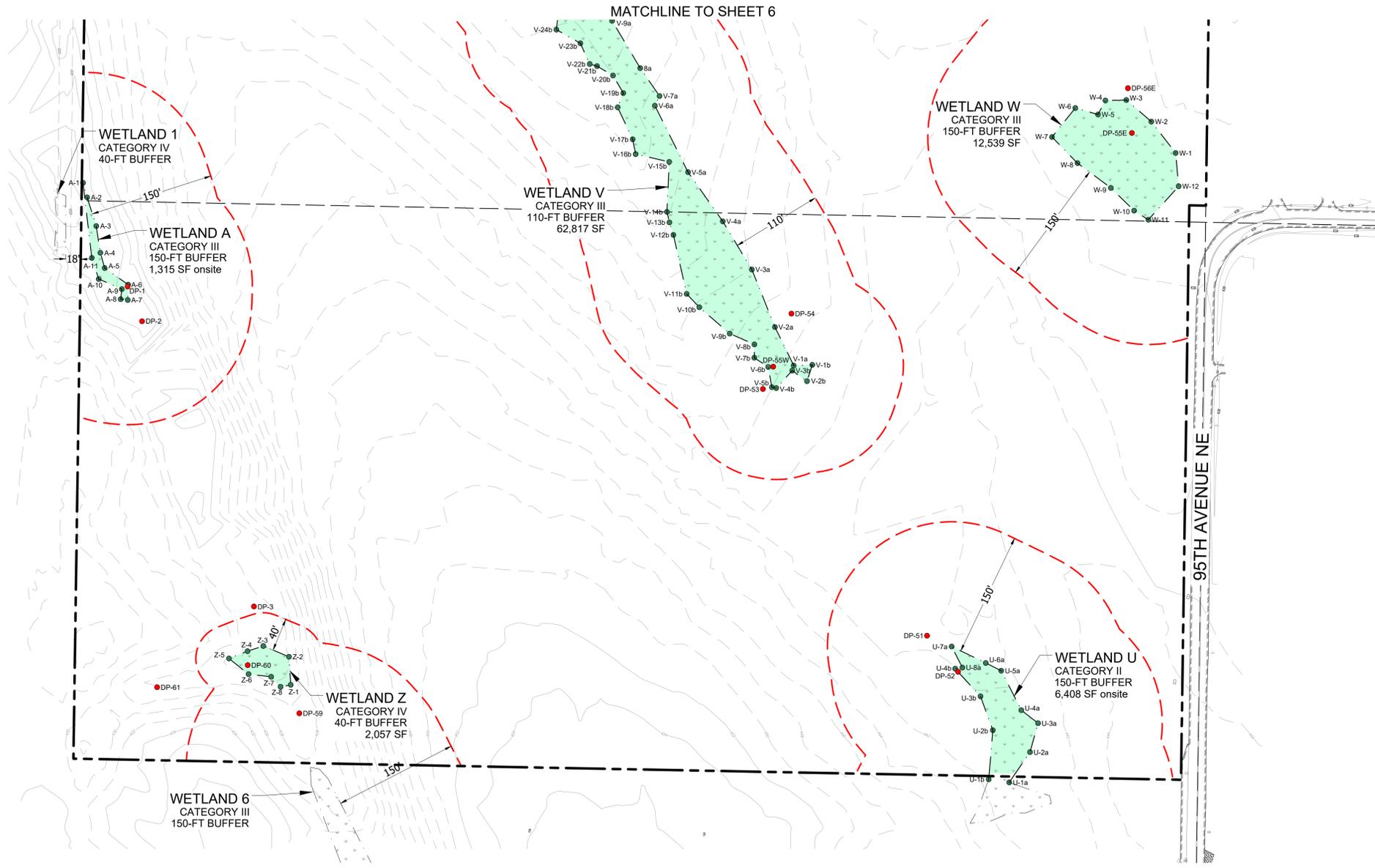
SOURCES:

Soundview Consultants LLC
 Environmental Assessment • Planning • Land Use Solutions
 2907 HARBORVIEW DRIVE
 GIG HARBOR, WASHINGTON 98335
 P. 253.514.8952
 F. 253.514.8954
 WWW.SOUNDVIEWCONSULTANTS.COM

ARLINGTON EAST HILL
 8904, 9104, 9110, & 9116 TWEIT ROAD,
 ARLINGTON, WA 98223
 SNOHOMISH COUNTY
 PARCEL NUMBER(S):
 31051200400200, 31051200401000, 31050200402300,
 31051200404000, 31051300100200, 3105300100300,
 31051200300100, & 31051200300500

DATE: 10/30/2024
 JOB: 2376.0008
 BY: MW
 SCALE: AS SHOWN
 SHEET: 6

C:\Users\Dan\OneDrive\COMPANY\CURRENT\2376_AH_Holdings LLC - Land Pro Group\2376.0008_Arlington_East_Hill_Graphical_&_Map\CAD\A - CURRENT\DWG\2376.0008_1024-10-30_haw.dwg
 Plotted October 30, 2024



PLAN LEGEND

- PROPERTY LINE
- EXISTING WETLAND BOUNDARY
- APPROXIMATED WETLAND BOUNDARY (NOT SURVEYED)
- WETLAND BUFFER
- W-# WETLAND FLAG LOCATION
- DP-# DATA PLOT LOCATION
- STREAM CENTERLINE
- APPROXIMATED STREAM CENTERLINE (NOT SURVEYED)
- STREAM BUFFER
- ▲O-# STREAM OHW (ORDINARY HIGH WATER) FLAG LOCATION
- EXISTING CONTOUR
- EXISTING EASEMENT

SOURCES:

Soundview Consultants LLC
Environmental Assessment • Planning • Land Use Solutions
P. 253.514.8952
F. 253.514.8954
WWW.SOUNDVIEWCONSULTANTS.COM

2907 HARBORVIEW DRIVE
GIG HARBOR, WASHINGTON 98335

ARLINGTON EAST HILL
8904, 9104, 9110, & 9116 TWEIT ROAD,
ARLINGTON, WA 98223

SNOHOMISH COUNTY
PARCEL NUMBER(S):
31051200400200, 31051200401000, 31050200402300,
31051200400400, 31051300100200, 3105300100300,
31051200300100, & 31051200300500

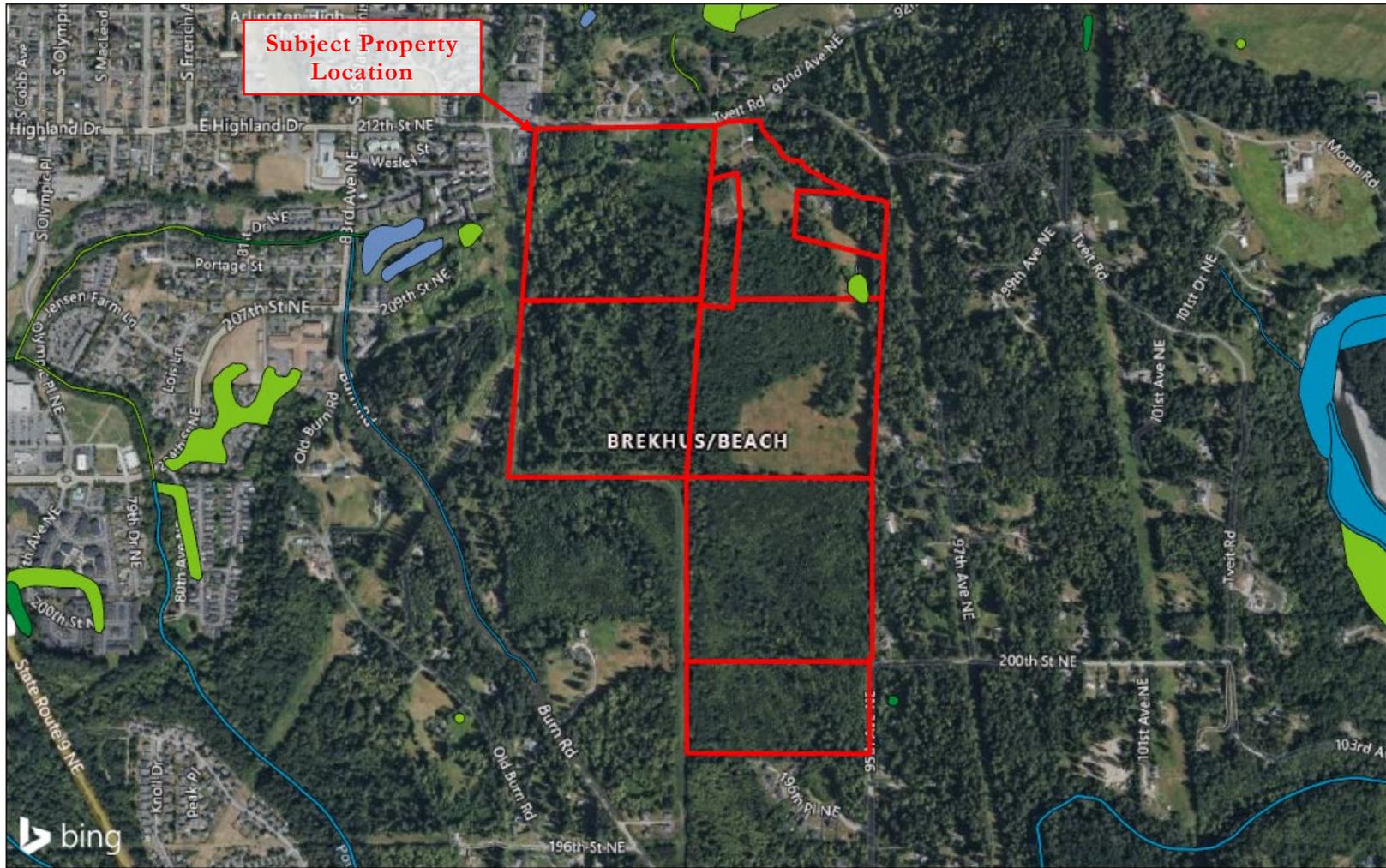
DATE: 10/30/2024
JOB: 2376.0008
BY: MW
SCALE: AS SHOWN
SHEET: 7

C:\Users\Donna\AppData\Local\Temp\2376_0008_Arlington_East_Hill_Graphics & Maps\CADD - CURRENT - Base\DWG\2376_0008_1024-10-30_base.dwg
Printed October 30, 2024

Attachment B – Background Information

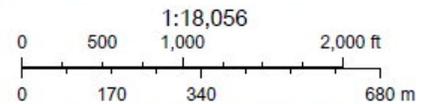
This attachment includes: USFWS NWI Map (B1), WDFW PHS Map (B2), Snohomish County Critical Areas Map (B3), NRCS Soil Survey Map (B4); DNR Stream Typing Map (B5); WDFW and NWIFC SWIFD Map (B6); Snohomish County Contours Map (B7).

Attachment B1 – USFWS NWI Map



8/18/2023, 9:50:21 AM

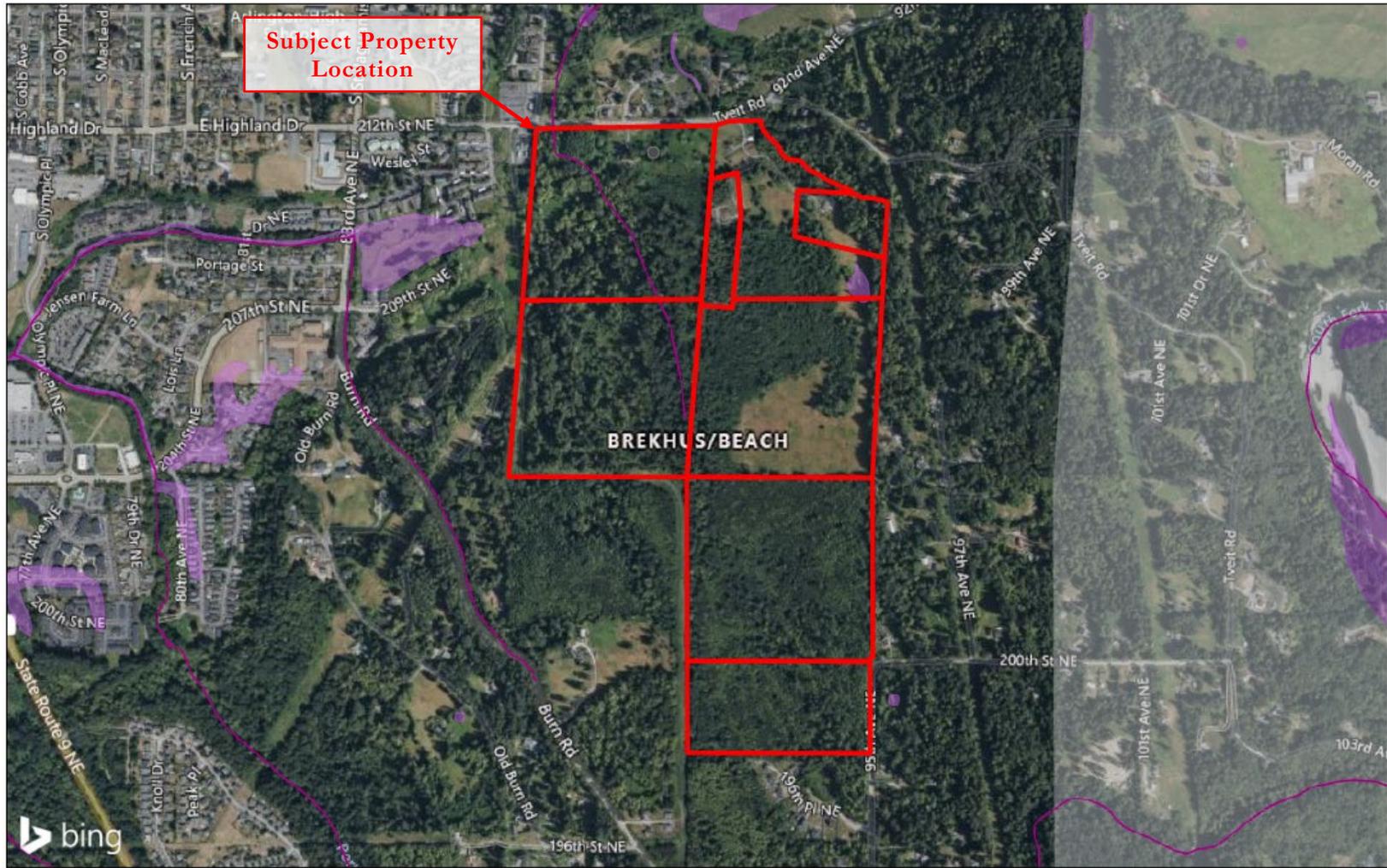
- | | |
|---|--|
| National Wetland Inventory (NWI) - Wetlands |  Freshwater Pond |
|  Freshwater Emergent Wetland |  Riverine |
|  Freshwater Forested/Shrub Wetland |  Snohomish_Parcels_Query result |



© 2023 Microsoft Corporation © 2023 Maxar ©CNES (2023) Distribution
Airbus DS © 2023 TomTom

Soundview Consultants

Attachment B2 – WDFW PHS Map



8/18/2023, 9:38:25 AM

- PHS Public Lines
- Masked
- TOWNSHIP
- PHS Public Polygon Outlines
- PHS Public Polygons
- AS MAPPED
- AS MAPPED
- Snohomish_Parcels_Query result

1:18,056
 0 500 1,000 2,000 ft
 0 170 340 680 m
 © 2023 Microsoft Corporation © 2023 Maxar ©CNES (2023) Distribution
 Airbus DS © 2023 TomTom, WDFW
 Soundview Consultants



Priority Habitats and Species on the Web

PHS Species/Habitats Overview:

Occurrence Name	Federal Status	State Status	Sensitive Location
Coho	Candidate	N/A	No
Freshwater Emergent Wetland	N/A	N/A	No
Freshwater Forested/Shrub Wetland	N/A	N/A	No
Freshwater Pond	N/A	N/A	No

PHS Species/Habitats Details:

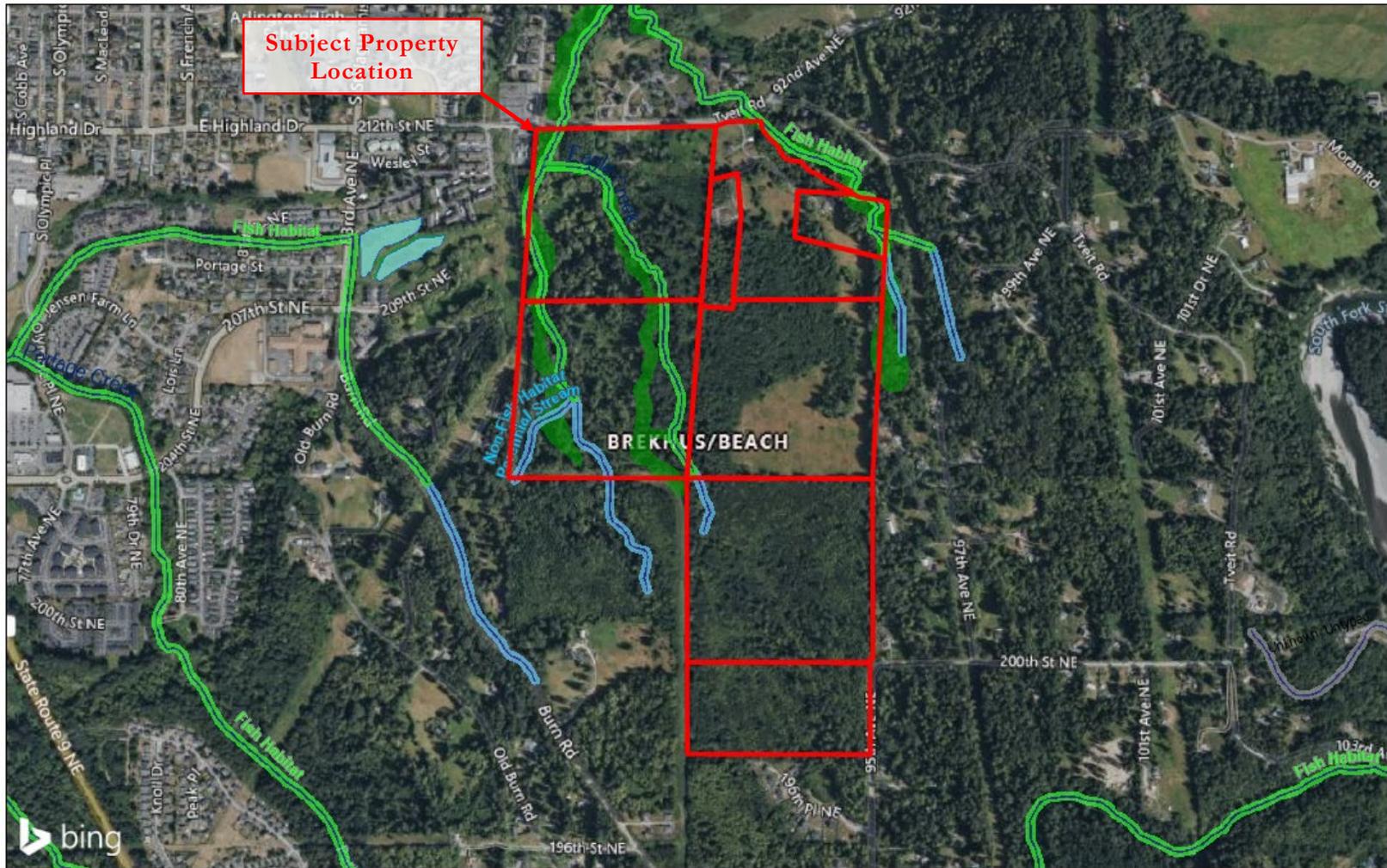
Coho	
Scientific Name	<i>Oncorhynchus kisutch</i>
Priority Area	Occurrence
Accuracy	NA
Notes	LLID: 1221056481908, Stock Name: Stillaguamish Coho, Run: Unspecified, Status: Healthy
Source Record	3060
Source Dataset	SASI
Source Name	Not Given
Source Entity	WDFW Fish Program
Federal Status	Candidate
State Status	N/A
PHS Listing Status	PHS Listed Occurrence
Sensitive	N
SGCN	N
Display Resolution	AS MAPPED
More Info	http://wdfw.wa.gov/wlm/diversty/soc/soc.htm
Geometry Type	Lines

Freshwater Emergent Wetland	
Priority Area	Aquatic Habitat
Site Name	N/A
Accuracy	NA
Notes	Wetland System: Freshwater Emergent Wetland - NWI Code: PEM1C
Source Dataset	NWIWetlands
Source Name	Not Given
Source Entity	US Fish and Wildlife Service
Federal Status	N/A
State Status	N/A
PHS Listing Status	PHS Listed Occurrence
Sensitive	N
SGCN	N
Display Resolution	AS MAPPED
ManagementRecommendations	http://www.ecy.wa.gov/programs/sea/wetlands/bas/index.html
Geometry Type	Polygons

Freshwater Emergent Wetland	
Priority Area	Aquatic Habitat
Site Name	N/A
Accuracy	NA
Notes	Wetland System: Freshwater Emergent Wetland - NWI Code: PEM1C
Source Dataset	NWIWetlands
Source Name	Not Given
Source Entity	US Fish and Wildlife Service
Federal Status	N/A
State Status	N/A
PHS Listing Status	PHS Listed Occurrence
Sensitive	N
SGCN	N
Display Resolution	AS MAPPED
ManagementRecommendations	http://www.ecy.wa.gov/programs/sea/wetlands/bas/index.html
Geometry Type	Polygons

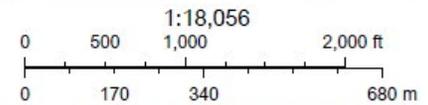
Freshwater Emergent Wetland	
Priority Area	Aquatic Habitat
Site Name	N/A
Accuracy	NA
Notes	Wetland System: Freshwater Emergent Wetland - NWI Code: PEM1C
Source Dataset	NWIIWetlands
Source Name	Not Given
Source Entity	US Fish and Wildlife Service
Federal Status	N/A
State Status	N/A
PHS Listing Status	PHS Listed Occurrence
Sensitive	N
SGCN	N
Display Resolution	AS MAPPED
ManagementRecommendations	http://www.ecy.wa.gov/programs/sea/wetlands/bas/index.html
Geometry Type	Polygons
Freshwater Forested/Shrub Wetland	
Priority Area	Aquatic Habitat
Site Name	N/A
Accuracy	NA
Notes	Wetland System: Freshwater Forested/Shrub Wetland - NWI Code: PSSC
Source Dataset	NWIIWetlands

Attachment B3 – Snohomish County Critical Areas Map



8/18/2023, 9:48:18 AM

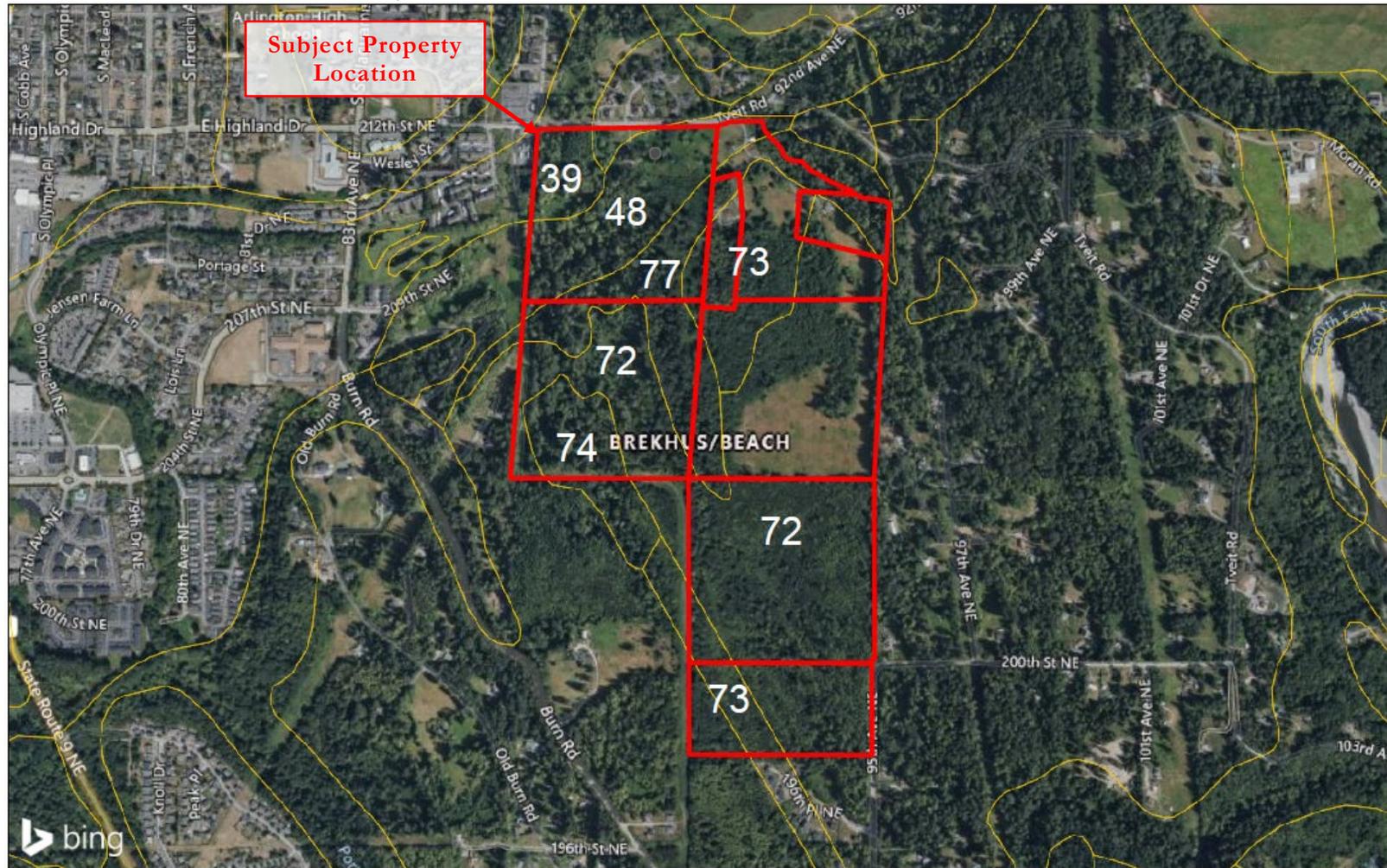
- Snohomish_Parcels_Query result
- Snohomish County Wetland Inventory
- Snohomish County Water Bodies
- Fish Habitat
- Snohomish County Streams
- Fish Habitat
- Non-fish Habitat Perennial
- Unknown, Untyped



© 2023 Microsoft Corporation © 2023 Maxar ©CNES (2023) Distribution Airbus DS © 2023 TomTom

Soundview Consultants

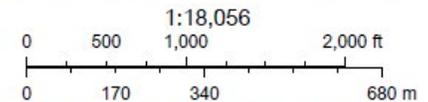
Attachment B4 – NRCS Soil Survey Map



8/18/2023, 9:39:26 AM

- Snohomish_Parcels_Query result
- USA Soils Map Units

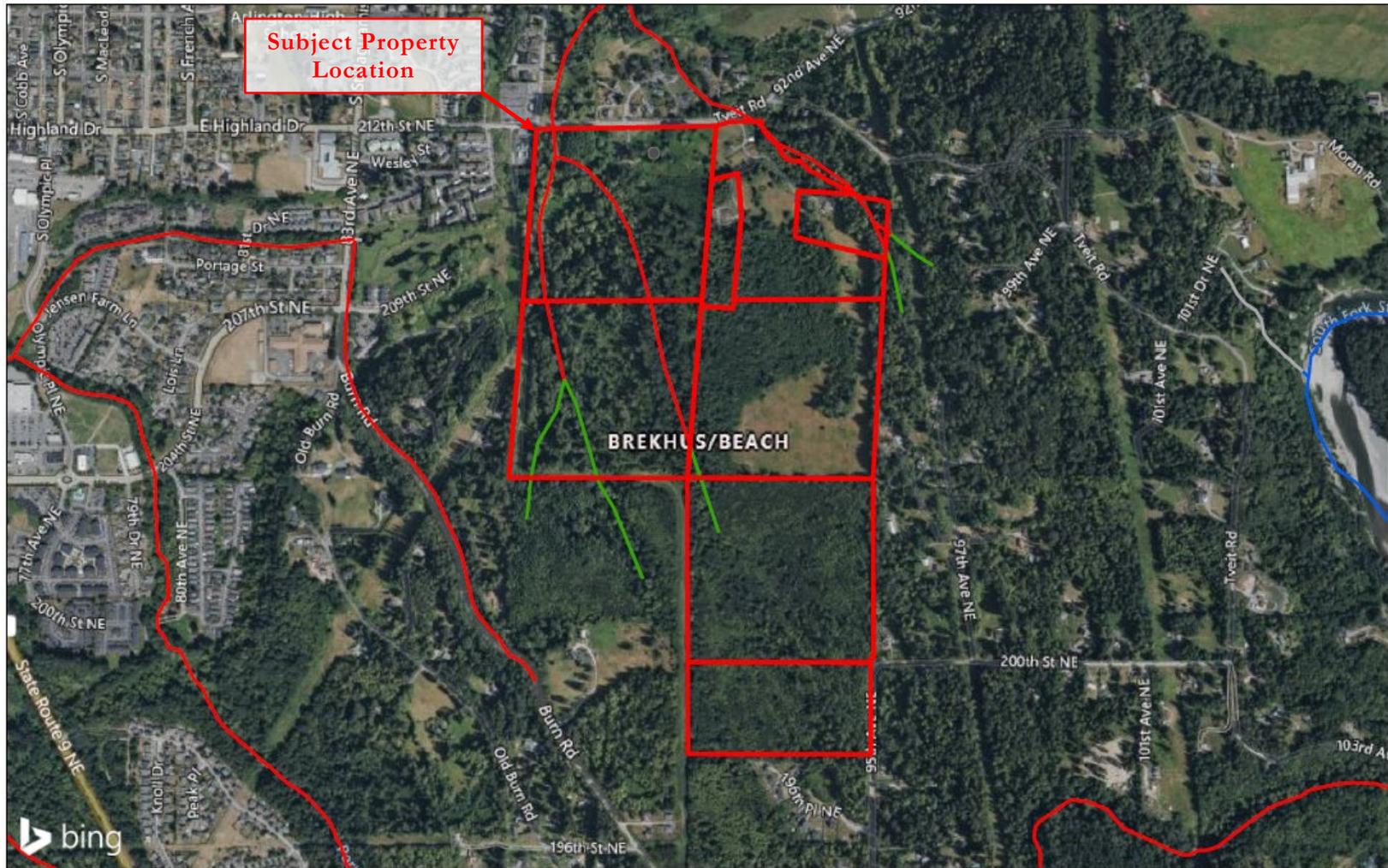
- 39: Norma loam
- 48: Pastik silt loam, 8 to 25 percent slopes
- 72: Tokul gravelly medial loam, 0 to 8 percent slopes
- 73: Tokul gravelly medial loam, 8 to 15 percent slopes
- 74: Tokul gravelly medial loam, 15 to 30 percent slopes
- 77: Tokul-Winston gravelly loams, 25 to 65 percent slopes



Source: USDA NRCS, Esri, © 2023 Microsoft Corporation © 2023 Maxar © CNES (2023) Distribution Airbus DS © 2023 TomTom

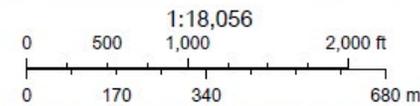
Soundview Consultants

Attachment B5 – DNR Stream Typing Map



8/18/2023, 9:22:45 AM

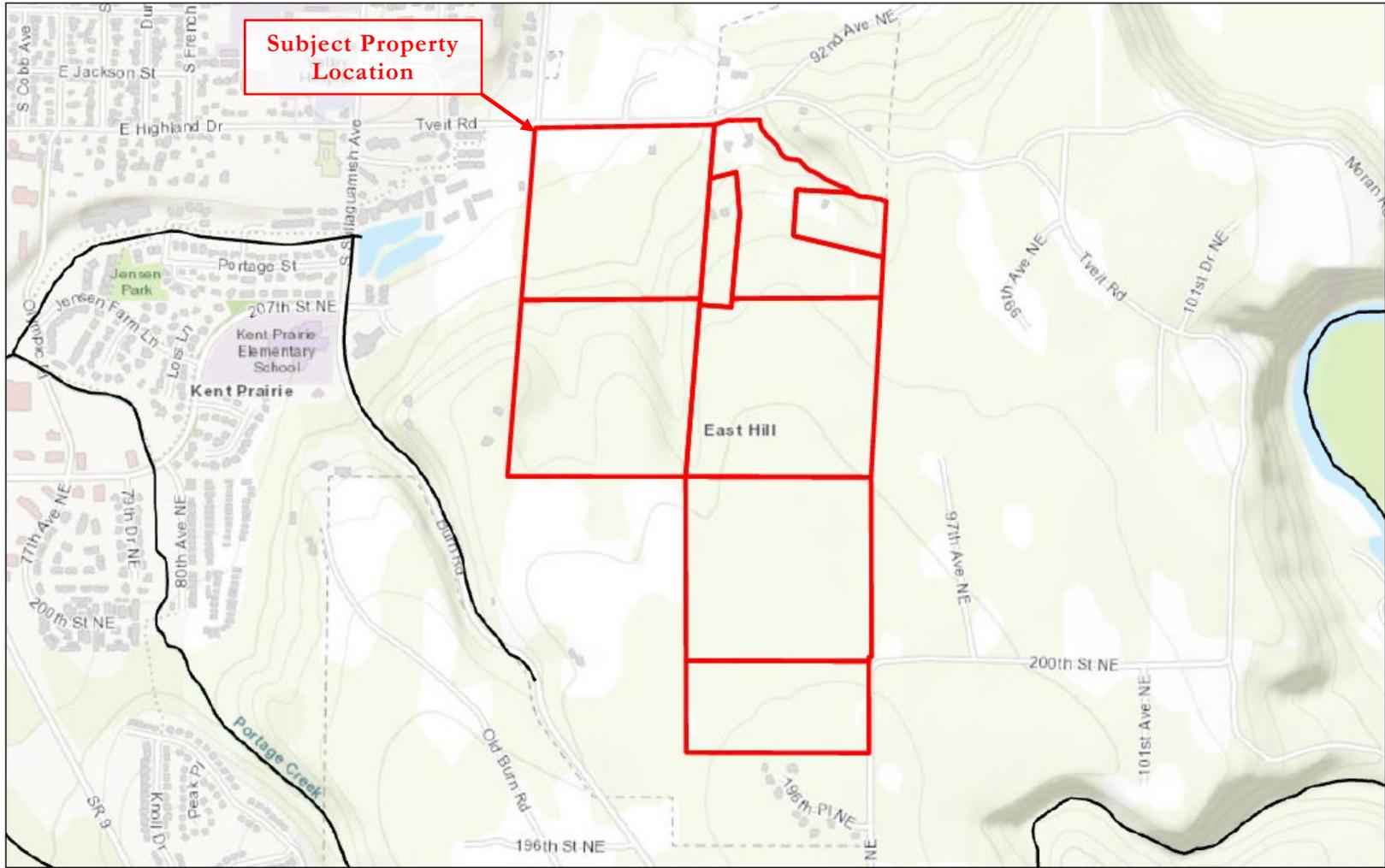
- Snohomish_Parcels_Query result
- Type F
- Type N, Np, Ns
- Type S
- U, unknown



© 2023 Microsoft Corporation © 2023 Maxar ©CNES (2023) Distribution Airbus DS © 2023 TomTom

Soundview Consultants

Attachment B6 – WDFW and NWIFC SWIFD Map



8/18/2023, 9:54:06 AM

- Snohomish_Parcels_Query result
- All SalmonScape Species

1:18,056

0 500 1,000 2,000 ft

0 170 340 680 m

City of Arlington, WA, Bureau of Land Management, Esri Canada, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA, WDFW

Soundview Consultants

Attachment C – Site Photographs

Upland Forest Conditions



Upland Forest Conditions



Upland Forest Conditions



Upland Field Conditions



Wetland A



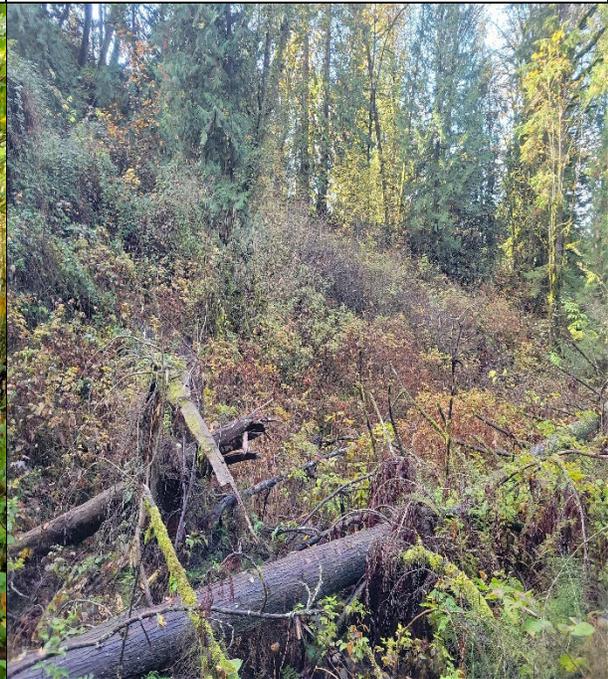
Wetland B



Wetland C



Wetland D/H



Wetland E



Wetland F



Wetland G



Wetland I





Wetland N



Wetland O



Wetland P



Wetland Q



Wetland R



Wetland S



Wetland T



Wetland U



Wetland V

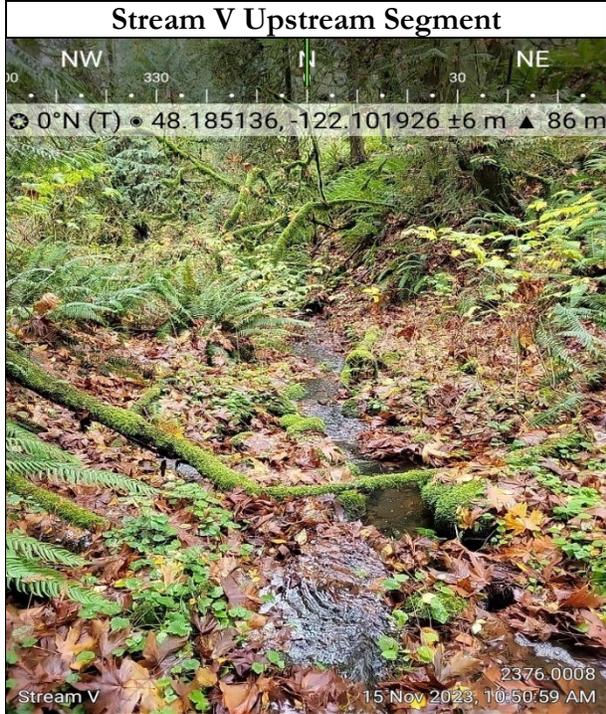


Wetland W



Wetland Z





Stream X Upstream Segment



Stream X Ditched Segment



Wetland P Draining to Stream Z, No Stream X channel



Stream Y Upstream Segment



Stream Y Upstream Segment



Stream Y Steep Drop Near Y-30



Stream Y Downstream Segment



Stream Z Upstream Segment



Stream Z – Large Boulders in Channel Near Z-20/Z-21

8404 207th St NE, Arlington, WA 98223, USA

☉ 163°SE (T) • 48.184086, -122.112314 ±14 ft ▲ 193 ft



Stream Z, Z-21 to Z-20

2376.0008
2023/11/09, 11:43:15 AM

Stream Z Mid-Channel Segment



Stream Z Downstream Segment



Attachment D – Data Forms

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 10/25/2023
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-1
 Investigator(s): Rachael Hyland, Casey Lanier Section, Township, Range: 12/13, 31N, 5E
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): None Slope (%): 1
 Subregion (LRR): A2 Lat: 48.176901 Long: -122.10781913 Datum: WGS 84
 Soil Map Unit Name: Tokul gravelly medial loam, 8 to 15 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center">All three wetland criteria met. Data collected in Wetland A in the western portion of the site.</p>	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30 ft</u>)					
1. <u>Thuja plicata</u>	<u>50</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
	<u>50</u>	= Total Cover			
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)					
1. <u>Rubus spectabilis</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
2. <u>Thuja plicata</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>		
3. <u>Acer circinatum</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>		
4. <u>Oemleria cerasiformis</u>	<u>1</u>	<u>No</u>	<u>FACU</u>		
5. _____	_____	_____	_____		
	<u>36</u>	= Total Cover			
Herb Stratum (Plot size: <u>10 ft</u>)					
1. <u>Polystichum munitum</u>	<u>3</u>	<u>No</u>	<u>FACU</u>		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
	<u>3</u>	= Total Cover			
Woody Vine Stratum (Plot size: <u>30 ft</u>)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>97</u>					

Remarks: Hydrophytic vegetation criteria met through dominance test.

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 10/25/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-2
 Investigator(s): Rachael Hyland, Casey Lanier Section, Township, Range: 13, 31N, 5E
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR): A2 Lat: 48.176773 Long: -122.10770052 Datum: WGS 84
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p align="center">Not all three wetland criteria met, only hydrophytic vegetation. Data collected south of Wetland A.</p>	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30 ft</u>)					
1. <u>Populus balsamifera</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>86%</u> (A/B)	
2. <u>Alnus rubra</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>		
3. _____					
4. _____					
	<u>55</u>	= Total Cover			
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)					
1. <u>Cornus alba</u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
2. <u>Sambucus racemosa</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>		
3. <u>Rubus spectabilis</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>		
4. _____					
5. _____					
	<u>15</u>	= Total Cover			
Herb Stratum (Plot size: <u>10 ft</u>)					
1. <u>Tolmeia mensiezii</u>	<u>3</u>	<u>Yes</u>	<u>FAC</u>		
2. <u>Anthyrium cyclosorum</u>	<u>2</u>	<u>Yes</u>	<u>FAC</u>		
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
	<u>5</u>	= Total Cover			
Woody Vine Stratum (Plot size: <u>30 ft</u>)					
1. _____					
2. _____					
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>95</u>					

Remarks: Hydrophytic vegetation criteria met through dominance test.

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 10/25/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-3
 Investigator(s): Rachael Hyland, Casey Lanier Section, Township, Range: 13, 31N, 5E
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 2
 Subregion (LRR): A2 Lat: 48.176773 Long: -122.10770052 Datum: WGS 84
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <u>Not all three wetland criteria met, only hydrophytic vegetation. Data collected in southwest corner of the site in forested swale.</u>	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30 ft</u>)				
1. <u>Thuja plicata</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. <u>Salix lasiandra</u>	<u>25</u>	<u>Yes</u>	<u>FACW</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>65</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)				
1. <u>Rubus spectabilis</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
2. <u>Rubus armeniacus</u>	<u>1</u>	<u>No</u>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>11</u>	= Total Cover		
Herb Stratum (Plot size: <u>10 ft</u>)				
1. <u>Tolmeia mensiezii</u>	<u>50</u>	<u>Yes</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Polystichum munitum</u>	<u>10</u>	<u>No</u>	<u>FACU</u>	
3. <u>Urtica dioica</u>	<u>1</u>	<u>No</u>	<u>FAC</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
	<u>61</u>	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>39</u>				

Remarks: Hydrophytic vegetation criteria met through dominance test.

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 10/26/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-4
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 10
 Subregion (LRR): A2 Lat: 48.184180 Long: -122.10996655 Datum: WGS 84
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: N/A

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 <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p align="center">No wetland criteria met. Data collected in western central portion of the site on ridge line east of Wetland E.</p>	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30 ft</u>)					
1. <u>Acer macrophyllum</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</u> (A/B)	
2. <u>Tsuga heterophylla</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>		
3. _____					
4. _____					
	<u>25</u>	= Total Cover			
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)					
1. <u>Rubus spectabilis</u>	<u>45</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
2. <u>Corylus cornuta</u>	<u>5</u>	<u>No</u>	<u>FACU</u>		
3. <u>Rubus armeniacus</u>	<u>5</u>	<u>No</u>	<u>FAC</u>		
4. <u>Pseudotsuga menziesii</u>	<u>3</u>	<u>No</u>	<u>FACU</u>		
5. <u>Rubus parviflorus</u>	<u>2</u>	<u>No</u>	<u>FACU</u>		
	<u>60</u>	= Total Cover			
Herb Stratum (Plot size: <u>10 ft</u>)					
1. <u>Tolmeia menziesii</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>		
2. <u>Polystichum munitum</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>		
3. <u>Rubus ursinus</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>		
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
	<u>35</u>	= Total Cover			
Woody Vine Stratum (Plot size: <u>30 ft</u>)					
1. _____					
2. _____					
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>65</u>					

Remarks:
 No hydrophytic vegetation criteria met. Dominance test failed prevalence index not warranted due to lack of combined hydric soils and hydrology.

SOIL

Sampling Point: DP-4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0 - 9	10YR 3/2	100	-	-	-	-	Loam	
9 - 16	7.5YR 4/6	100	-	-	-	-	SaLo	Sandy loam with charcoal

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 10/26/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-5
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope (%): 2
 Subregion (LRR): A2 Lat: 48.185057 Long: -122.10991352 Datum: WGS 84
 Soil Map Unit Name: Pastik silt loam, 8 to 25 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center">All three wetland criteria met. Data collected in western portion of Wetland B.</p>	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
				<u>0</u> = Total Cover
<u>Sapling/Shrub Stratum</u> (Plot size: <u>30 ft</u>)				
1. <u>Oplopanax horridus</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Acer circinatum</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
3. <u>Rubus spectabilis</u>	<u>3</u>	<u>No</u>	<u>FAC</u>	
4. <u>Thuja plicata</u>	<u>2</u>	<u>No</u>	<u>FAC</u>	
5. _____	_____	_____	_____	
				<u>40</u> = Total Cover
<u>Herb Stratum</u> (Plot size: <u>10 ft</u>)				
1. <u>Tolmeia mensiezii</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Anthyrium cyclosorum</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>	
3. <u>Polystichum munitum</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	
4. <u>Equisetum arvense</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
5. <u>Lysichiton americanus</u>	<u>2</u>	<u>No</u>	<u>OBL</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
				<u>67</u> = Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
				<u>0</u> = Total Cover
% Bare Ground in Herb Stratum <u>33</u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
 Total Number of Dominant Species Across All Strata: 3 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by:
 OBL species _____ x 1 = _____
 FACW species _____ x 2 = _____
 FAC species _____ x 3 = _____
 FACU species _____ x 4 = _____
 UPL species _____ x 5 = _____
 Column Totals: _____ (A) _____ (B)
 Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
 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
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Remarks: Hydrophytic vegetation criteria met through dominance test.	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---	--

SOIL

Sampling Point: DP-5

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

Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0 - 8	10YR 2/1	100	-	-	-	-	Loam	Loam
8 - 16	10Y 4/1	93	10YR 4/4	7	C	M	fiSaLo	Fine sandy loam

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

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

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input checked="" type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

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

Restrictive Layer (if present):
Type: N/A
Depth (inches): --

Hydric Soil Present? Yes No

Remarks:
Hydric soil criteria met through indicators A11 and F2.

HYDROLOGY

Wetland Hydrology Indicators:

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

Field Observations:

Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>17</u>	
Saturation Present? (includes capillary fringe)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>11</u>	

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

Remarks:
Hydrology criteria met directly through primary indicator A3.

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 10/26/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-6
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12/13, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 15
 Subregion (LRR): A2 Lat: 48.185029 Long: -122.11004305 Datum: WGS 84
 Soil Map Unit Name: Pastik silt loam, 8 to 25 percent slopes NWI classification: N/A

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 <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p align="center">No wetland criteria met. Data collected west of Wetland B.</p>	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30 ft</u>)					
1. <u>Acer macrophyllum</u>	<u>40</u>	<u>Yes</u>	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)	
2. <u>Thuja plicata</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>		
3. _____					
4. _____					
	<u>80</u>	= Total Cover		Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)					
1. <u>Rubus armeniacus</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>		
2. _____					
3. _____					
4. _____					
	<u>40</u>	= Total Cover			
Herb Stratum (Plot size: <u>10 ft</u>)					
1. <u>Polystichum munitum</u>	<u>30</u>	<u>Yes</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
2. <u>Trientalis borealis</u>	<u>5</u>	<u>No</u>	<u>FAC</u>		
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
	<u>35</u>	= Total Cover			
Woody Vine Stratum (Plot size: <u>30 ft</u>)					
1. _____					
2. _____					
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>65</u>					

Remarks: **No hydrophytic vegetation criteria met. Dominance test failed prevalence index not warranted due to lack of combined hydric soils and hydrology.**

SOIL

Sampling Point: DP-6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0 - 5	10YR 3/2	100	-	-	-	-	SiLo	Silt loam
5 - 12	10YR 3/3	100	-	-	-	-	SiLo	Silt loam
12 - 16	10YR 5/4	97	2.5Y 5/2	3	D	M	SiLo	Silt loam
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)						Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/> Histosol (A1)			<input type="checkbox"/> Sandy Redox (S5)			<input type="checkbox"/> 2 cm Muck (A10)		
<input type="checkbox"/> Histic Epipedon (A2)			<input type="checkbox"/> Stripped Matrix (S6)			<input type="checkbox"/> Red Parent Material (TF2)		
<input type="checkbox"/> Black Histic (A3)			<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)			<input type="checkbox"/> Very Shallow Dark Surface (TF12)		
<input type="checkbox"/> Hydrogen Sulfide (A4)			<input type="checkbox"/> Loamy Gleyed Matrix (F2)			<input type="checkbox"/> Other (Explain in Remarks)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)			<input type="checkbox"/> Depleted Matrix (F3)			³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.		
<input type="checkbox"/> Thick Dark Surface (A12)			<input type="checkbox"/> Redox Dark Surface (F6)					
<input type="checkbox"/> Sandy Mucky Mineral (S1)			<input type="checkbox"/> Depleted Dark Surface (F7)					
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			<input type="checkbox"/> Redox Depressions (F8)					
Restrictive Layer (if present): Type: <u>N/A</u> Depth (inches): <u>--</u>								
Remarks: No hydric soil criteria met.								

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:			
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>		
Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (includes capillary fringe)	Depth (inches): <u>None</u>		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No hydrology criteria met.			

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 10/26/2023
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-7
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12/13, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR): A2 Lat: 48.186673 Long: -122.11039620 Datum: WGS 84
 Soil Map Unit Name: Pastik silt loam, 8 to 25 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: All three wetland criteria met. Data collected in Wetland C in the northern portion of the site, and west/south of Stream Y.	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Alnus rubra</u>	<u>5</u>	Yes	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>5</u> = Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>30 ft</u>)				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. <u>Rubus spectabilis</u>	<u>80</u>	Yes	FAC	
2. <u>Ribes bracteosum</u>	<u>5</u>	No	FAC	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>85</u> = Total Cover				
<u>Herb Stratum</u> (Plot size: <u>10 ft</u>)				Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Tolmeia mensiezii</u>	<u>80</u>	Yes	FAC	
2. <u>Athyrium cyclosorum</u>	<u>15</u>	No	FAC	
3. <u>Equisetum arvense</u>	<u>1</u>	No	FAC	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
<u>96</u> = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>4</u>				

Remarks: **Hydrophytic vegetation criteria met through dominance test.**

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 10/26/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-8
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 7
 Subregion (LRR): A2 Lat: 48.186689 Long: -122.11052448 Datum: WGS 84
 Soil Map Unit Name: Norma Loam NWI classification: N/A

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 <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p style="text-align: center; font-weight: bold;">No wetland criteria met. Data collected west of Wetland C.</p>	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30 ft</u>)					
1. <u>Alnus rubra</u>	<u>20</u>	Yes	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>40%</u> (A/B)	
2. <u>Prunus sp.*</u>	<u>10</u>	Yes	FACU		
3. _____					
4. _____					
	<u>30</u>	= Total Cover			
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)					
1. <u>Rubus spectabilis</u>	<u>60</u>	Yes	FAC	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
2. <u>Oemleria cerasiformis</u>	<u>20</u>	Yes	FACU		
3. <u>Sambucus racemosa</u>	<u>15</u>	No	FACU		
4. _____					
5. _____					
	<u>95</u>	= Total Cover			
Herb Stratum (Plot size: <u>10 ft</u>)					
1. <u>Polystichum munitum</u>	<u>15</u>	Yes	FACU		
2. <u>Tolmeia mensiezii</u>	<u>2</u>	No	FAC		
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
	<u>17</u>	= Total Cover			
Woody Vine Stratum (Plot size: <u>30 ft</u>)					
1. _____					
2. _____					
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>83</u>					

Remarks: No hydrophytic vegetation criteria met. Dominance test failed prevalence index not warranted due to lack of combined hydric soils and hydrology. *Could not be identified to species, assigned FACU based on genus.

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 10/26/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-9
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 2
 Subregion (LRR): A2 Lat: 48.187559 Long: -122.11098393 Datum: WGS 84
 Soil Map Unit Name: Norma loam NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Not all three wetland criteria met, only hydrophytic vegetation criteria met. Data collected in northern portion of the site in representative forested area.	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30 ft</u>)					
1. <u>Alnus rubra</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)	
2. <u>Populus balsamifera</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
	<u>55</u>	= Total Cover			
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)					
1. <u>Rubus armeniacus</u>	<u>60</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
2. <u>Rubus spectabilis</u>	<u>10</u>	<u>No</u>	<u>FAC</u>		
3. <u>Sambucus racemosa</u>	<u>5</u>	<u>No</u>	<u>FACU</u>		
4. <u>Ilex aquifolium</u>	<u>2</u>	<u>No</u>	<u>FACU</u>		
5. _____	_____	_____	_____		
	<u>77</u>	= Total Cover			
Herb Stratum (Plot size: <u>10 ft</u>)					
1. <u>Ranunculus repens</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
	<u>25</u>	= Total Cover			
Woody Vine Stratum (Plot size: <u>30 ft</u>)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>75</u>					

Remarks: **Hydrophytic vegetation criteria met through dominance test.**

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 10/30/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-10
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 7
 Subregion (LRR): A2 Lat: 48.185932 Long: -122.10990212 Datum: WGS 84
 Soil Map Unit Name: Pastik silt loam, 8 to 25 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Not all three wetland criteria met, only hydrophytic vegetation criteria met. Data collected in northern portion of the site in representative forested area.	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30 ft</u>)					
1. <u>Alnus rubra</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75%</u> (A/B)	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
	<u>20</u>	= Total Cover			
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)					
1. <u>Rubus spectabilis</u>	<u>65</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
2. <u>Rubus armeniacus</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>		
3. <u>Sambucus racemosa</u>	<u>2</u>	<u>No</u>	<u>FACU</u>		
4. <u>Acer circinatum</u>	<u>1</u>	<u>No</u>	<u>FAC</u>		
5. _____	_____	_____	_____		
	<u>93</u>	= Total Cover			
Herb Stratum (Plot size: <u>10 ft</u>)					
1. <u>Polystichum munitum</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
	<u>5</u>	= Total Cover			
Woody Vine Stratum (Plot size: <u>30 ft</u>)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>95</u>					

Remarks: **Hydrophytic vegetation criteria met through dominance test.**

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 10/30/2023
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-11
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 5
 Subregion (LRR): A2 Lat: 48.185941 Long: -122.10974457 Datum: WGS 84
 Soil Map Unit Name: Pastik silt loam, 8 to 25 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center">All three wetland criteria met. Data collected in Wetland D in the northern portion of the site, and east of Stream Y.</p>	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
				0 = Total Cover
<u>Sapling/Shrub Stratum</u> (Plot size: <u>30 ft</u>)				
1. <u>Rubus spectabilis</u>	40	Yes	FAC	
2. <u>Acer circinatum</u>	35	Yes	FAC	
3. <u>Ribes bracteosum</u>	10	No	FAC	
4. <u>Sambucus racemosa</u>	10	No	FACU	
5. _____	_____	_____	_____	
				95 = Total Cover
<u>Herb Stratum</u> (Plot size: <u>10 ft</u>)				
1. <u>Tolmeia mensiezii</u>	40	Yes	FAC	
2. <u>Athyrium cyclosorum</u>	10	No	FAC	
3. <u>Polystichum munitum</u>	5	No	FACU	
4. <u>Lysichiton americanus</u>	5	No	OBL	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
				60 = Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
				0 = Total Cover
<u>% Bare Ground in Herb Stratum</u> <u>40</u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
 Total Number of Dominant Species Across All Strata: 3 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by:
 OBL species _____ x 1 = _____
 FACW species _____ x 2 = _____
 FAC species _____ x 3 = _____
 FACU species _____ x 4 = _____
 UPL species _____ x 5 = _____
 Column Totals: _____ (A) _____ (B)
 Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
 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
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No

Remarks: Hydrophytic vegetation criteria met through dominance test.

SOIL

Sampling Point: DP-11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0 - 8	10YR 3/2	100	-	-	-	-	SiLo	Silt loam
8 - 14	10YR 3/1	96	10YR 3/4	2	C	M	SiLo	Silt loam
			10YR 4/1	2	D	M		
			</					

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 10/30/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-12
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 5
 Subregion (LRR): A2 Lat: 48.185675 Long: -122.10457152 Datum: WGS 84
 Soil Map Unit Name: Tokul gravelly medial loam, 8 to 15 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Not all three wetland criteria met, only hydrophytic vegetation criteria met. Data collected in northern eastern portion of the site near transition from forest to mowed field.	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30 ft</u>)				
1. <u>Alnus rubra</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>30</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)				
1. <u>Rubus spectabilis</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
2. <u>Sambucus racemosa</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>45</u>	= Total Cover		
Herb Stratum (Plot size: <u>10 ft</u>)				
1. <u>Tolmeia mensiezii</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Athyrium cyclosorum</u>	<u>2</u>	<u>No</u>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
	<u>22</u>	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>78</u>				

Remarks: **Hydrophytic vegetation criteria met through dominance test.**

SOIL

Sampling Point: DP-12

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0 - 7	10YR 2/2	100	-	-	-	-	Loam	
7 - 9	10YR 3/2	98	10YR 3/3	2	C	M	SiLo	Silt loam
9 - 11	10YR 4/2	93	10YR 3/4	7	C	M	SiClLo	Silty clay loam
11 - 16	2.5Y 3/2	100	-	-	-	-	ClLo	Clay loam
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)						Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/> Histosol (A1)			<input type="checkbox"/> Sandy Redox (S5)			<input type="checkbox"/> 2 cm Muck (A10)		
<input type="checkbox"/> Histic Epipedon (A2)			<input type="checkbox"/> Stripped Matrix (S6)			<input type="checkbox"/> Red Parent Material (TF2)		
<input type="checkbox"/> Black Histic (A3)			<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)			<input type="checkbox"/> Very Shallow Dark Surface (TF12)		
<input type="checkbox"/> Hydrogen Sulfide (A4)			<input type="checkbox"/> Loamy Gleyed Matrix (F2)			<input type="checkbox"/> Other (Explain in Remarks)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)			<input type="checkbox"/> Depleted Matrix (F3)			³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.		
<input type="checkbox"/> Thick Dark Surface (A12)			<input type="checkbox"/> Redox Dark Surface (F6)					
<input type="checkbox"/> Sandy Mucky Mineral (S1)			<input type="checkbox"/> Depleted Dark Surface (F7)					
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			<input type="checkbox"/> Redox Depressions (F8)					
Restrictive Layer (if present):						Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Type: <u>N/A</u>								
Depth (inches): <u>--</u>								
Remarks: No hydric soil criteria met. Third layer is not thick enough (<4") to meet A11 or F3 criteria.								

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:			
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<u>None</u>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<u>None</u>
Saturation Present? (includes capillary fringe)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<u>None</u>
		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No hydrology criteria met.			

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 10/31/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-13
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope (%): 0
 Subregion (LRR): A2 Lat: 48.181733 Long: -122.10386651 Datum: WGS 84
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Not all three wetland criteria met, only hydrophytic vegetation criteria met. Data collected in central-eastern portion of the site in a maintained field.	

VEGETATION – Use scientific names of plants.

	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	
Tree Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)				
1. <u>Rubus lacianatus</u>	<u>8</u>	<u>Yes</u>	<u>FACU</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>8</u>	= Total Cover		
Herb Stratum (Plot size: <u>10 ft</u>)				
1. <u>Ranunculus repens</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Hypericum anagalloides</u>	<u>20</u>	<u>Yes</u>	<u>OBL</u>	
3. <u>Phalaris arundinacea</u>	<u>15</u>	<u>No</u>	<u>FACW</u>	
4. <u>Anthoxanthum odoratum</u>	<u>15</u>	<u>No</u>	<u>FACU</u>	
5. <u>Epilobium ciliatum</u>	<u>5</u>	<u>No</u>	<u>FACW</u>	
6. <u>Leucanthemum vulgare</u>	<u>2</u>	<u>No</u>	<u>FACU</u>	
7. <u>Juncus effusus</u>	<u>1</u>	<u>No</u>	<u>FACW</u>	
8. <u>Juncus ensifolius</u>	<u>1</u>	<u>No</u>	<u>FACW</u>	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
	<u>89</u>	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>11</u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
 Total Number of Dominant Species Across All Strata: 3 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by:
 OBL species _____ x 1 = _____
 FACW species _____ x 2 = _____
 FAC species _____ x 3 = _____
 FACU species _____ x 4 = _____
 UPL species _____ x 5 = _____
 Column Totals: _____ (A) _____ (B)
 Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
 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
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Remarks: Hydrophytic vegetation criteria met through dominance test.	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---	--

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 10/31/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-14
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope (%): 1
 Subregion (LRR): A2 Lat: 48.182842 Long: -122.10411414 Datum: WGS 84
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: N/A

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 <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p align="center">No wetland criteria met. Data collected in central-eastern portion of the site in a maintained field.</p>	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)				
1. <u>Rubus lacianatus</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>5</u>	= Total Cover		
Herb Stratum (Plot size: <u>10 ft</u>)				
1. <u>Anthoxanthum odoratum</u>	<u>60</u>	<u>Yes</u>	<u>FACU</u>	
2. <u>Juncus ensifolius</u>	<u>7</u>	<u>No</u>	<u>FACW</u>	
3. <u>Ranunculus repens</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
4. <u>Agrostis capillaris</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
5. <u>Schedonorus arundinaceus</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
6. <u>Juncus effusus</u>	<u>3</u>	<u>No</u>	<u>FACW</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
	<u>85</u>	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>15</u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
 Total Number of Dominant Species Across All Strata: 2 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by:
 OBL species _____ x 1 = _____
 FACW species _____ x 2 = _____
 FAC species _____ x 3 = _____
 FACU species _____ x 4 = _____
 UPL species _____ x 5 = _____
 Column Totals: _____ (A) _____ (B)
 Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
 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
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No

Remarks: **No hydrophytic vegetation criteria met. Dominance test failed, prevalence index not warranted due to lack of combined hydric soil and hydrology.**

SOIL

Sampling Point: DP-14

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 6	7.5YR 2.5/2	100	-	-	-	-	SiLo	Silt loam
6 - 8	10YR 3/1	96	7.5YR 2.5/3	4	C	C	GrLo	Gravelly loam, with charcoal
8 - 12	7.5YR 2.5/2	90	-	-	-	-	SiLo	Silt loam, mixed matrix
	10YR 3/1	10	-	-	-	-	GrLo	Gravelly loam, mixed matrix
12 - 14	10YR 3/1	95	5YR 3/3	5	C	M/PL	GrLo	Gravelly loam
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)						Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/> Histosol (A1)			<input type="checkbox"/> Sandy Redox (S5)			<input type="checkbox"/> 2 cm Muck (A10)		
<input type="checkbox"/> Histic Epipedon (A2)			<input type="checkbox"/> Stripped Matrix (S6)			<input type="checkbox"/> Red Parent Material (TF2)		
<input type="checkbox"/> Black Histic (A3)			<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)			<input type="checkbox"/> Very Shallow Dark Surface (TF12)		
<input type="checkbox"/> Hydrogen Sulfide (A4)			<input type="checkbox"/> Loamy Gleyed Matrix (F2)			<input type="checkbox"/> Other (Explain in Remarks)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)			<input type="checkbox"/> Depleted Matrix (F3)			³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.		
<input type="checkbox"/> Thick Dark Surface (A12)			<input type="checkbox"/> Redox Dark Surface (F6)					
<input type="checkbox"/> Sandy Mucky Mineral (S1)			<input type="checkbox"/> Depleted Dark Surface (F7)					
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			<input type="checkbox"/> Redox Depressions (F8)					
Restrictive Layer (if present): Type: <u>N/A</u> Depth (inches): <u>--</u>								
Remarks: No hydric soil criteria met. Redox in second layer is not thick enough (<4") to meet F6 requirement, and fourth layer begins too deep (>8") to meet F6 requirement.								

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:			
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<u>None</u>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<u>None</u>
Saturation Present? (includes capillary fringe)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<u>None</u>
		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No hydrology criteria met.			

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 10/31/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-15
 Investigator(s): Casey Lanier Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 5
 Subregion (LRR): A2 Lat: 48.185059 Long: -122.11089038 Datum: WGS 84
 Soil Map Unit Name: Pastik silt loam, 8 to 25 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Not all three wetland criteria met, only hydrophytic vegetation criteria met. Data collected east of Stream X, and between Wetland G and Wetland E.	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30 ft</u>)				
1. <u>Acer macrophyllum</u>	<u>65</u>	<u>Yes</u>	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
2. <u>Thuja plicata</u>	<u>10</u>	<u>No</u>	<u>FAC</u>	
3. _____				
4. _____				
	<u>75</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)				
1. <u>Rubus spectabilis</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
2. _____				
3. _____				
4. _____				
5. _____				
	<u>5</u>	= Total Cover		
Herb Stratum (Plot size: <u>10 ft</u>)				
1. <u>Tolmeia mensiezii</u>	<u>60</u>	<u>Yes</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Polystichum munitum</u>	<u>35</u>	<u>Yes</u>	<u>FACU</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
	<u>95</u>	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft</u>)				
1. _____				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. _____				
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>5</u>				

Remarks: **No hydrophytic vegetation criteria met. Dominance test failed; prevalence index not warranted due to the lack of combined hydric soils and hydrology criteria.**

SOIL

Sampling Point: DP-15

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

Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0 - 10	10YR 3/2	100	-	-	-	-	SiLo	Silt loam
10 - 16	10YR 3/3	95	7.5YR 4/3	5	C	M	SiLo	Silt loam

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

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

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks)		
³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.		

Restrictive Layer (if present):
 Type: N/A
 Depth (inches): --

Hydric Soil Present? Yes No

Remarks:
 No hydric soil criteria met.

HYDROLOGY

Wetland Hydrology Indicators:

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

Field Observations:

Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>	
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>	
(includes capillary fringe)			

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

Remarks:
 No hydrology criteria met. No evidence of water table to 16" BGS.

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/9/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-16
 Investigator(s): Casey Lanier Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 5
 Subregion (LRR): A2 Lat: 48.184983 Long: -122.11074555 Datum: WGS 84
 Soil Map Unit Name: Pastik silt loam, 8 to 25 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center">All three wetland criteria met. Data collected in Wetland E.</p>	

VEGETATION – Use scientific names of plants.

	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	
Tree Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)				
1. <u>Rubus spectabilis</u>	<u>45</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Sambucus racemosa</u>	<u>2</u>	<u>No</u>	<u>FACU</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>47</u>	= Total Cover		
Herb Stratum (Plot size: <u>10 ft</u>)				
1. <u>Tolmeia mensiezii</u>	<u>95</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Athyrium cyclosorum</u>	<u>2</u>	<u>No</u>	<u>FAC</u>	
3. <u>Urtica dioica</u>	<u>2</u>	<u>No</u>	<u>FAC</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
	<u>99</u>	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>1</u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
 Total Number of Dominant Species Across All Strata: 2 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by:
 OBL species _____ x 1 = _____
 FACW species _____ x 2 = _____
 FAC species _____ x 3 = _____
 FACU species _____ x 4 = _____
 UPL species _____ x 5 = _____
 Column Totals: _____ (A) _____ (B)
 Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
 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
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No

Remarks: Hydrophytic vegetation criteria met through dominance test.

SOIL

Sampling Point: DP-16

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

Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0 - 11	10YR 2/1	100	-	-	-	-	SiLo	Silt loam
11 - 16+	5Y 4/1	95	2.5Y 4/3	5	C	M	SaLo	Sandy loam

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

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

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

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

Restrictive Layer (if present):
 Type: N/A
 Depth (inches): --

Hydric Soil Present? Yes No

Remarks:
 Hydric soil criteria met through indicator A11.

HYDROLOGY

Wetland Hydrology Indicators:

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

Field Observations:

Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>14</u>	
Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>Surface</u>	

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

Remarks:
 Hydrology criteria met directly through primary indicator A3. Water table presumed to be higher than 14 inches, could not allow more time to equilibrate within pit due to time constraints.

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 10/26/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-17
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope (%): 2
 Subregion (LRR): A2 Lat: 48.185057 Long: -122.10991352 Datum: WGS 84
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center">All three wetland criteria met. Data collected in central portion of Wetland F.</p>	

VEGETATION – Use scientific names of plants.

	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	
Tree Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)				
1. <u>Cornus alba</u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>5</u>	= Total Cover		
Herb Stratum (Plot size: <u>10 ft</u>)				
1. <u>Ranunculus repens</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Schedonorus arundinaceus</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>	
3. <u>Agrostis capillaris</u>	<u>10</u>	<u>No</u>	<u>FAC</u>	
4. <u>Holcus lanatus</u>	<u>10</u>	<u>No</u>	<u>FAC</u>	
5. <u>Anthyrium cyclosorum</u>	<u>8</u>	<u>No</u>	<u>FAC</u>	
6. <u>Juncus effusus</u>	<u>2</u>	<u>No</u>	<u>FACW</u>	
7. <u>Rumex crispus</u>	<u>2</u>	<u>No</u>	<u>FAC</u>	
8. <u>Epilobium ciliatum</u>	<u>1</u>	<u>No</u>	<u>FACW</u>	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
	<u>93</u>	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>7</u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
 Total Number of Dominant Species Across All Strata: 3 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by:
 OBL species _____ x 1 = _____
 FACW species _____ x 2 = _____
 FAC species _____ x 3 = _____
 FACU species _____ x 4 = _____
 UPL species _____ x 5 = _____
 Column Totals: _____ (A) _____ (B)
 Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
 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
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Remarks: Hydrophytic vegetation criteria met through dominance test.	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---	--

SOIL

Sampling Point: DP-17

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0 - 5	10YR 2/2	100	-	-	-	-	Loam	
5 - 10	7.5YR 3/1	95	7.5YR 4/4	5	C	M	Loam	
10 - 17	10YR 4/2	90	7.5YR 4/6	10	C	M	SaLo	Sandy loam

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

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

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

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

Restrictive Layer (if present):
Type: N/A
Depth (inches): --

Hydric Soil Present? Yes No

Remarks:
Hydric soil criteria met through indicators A11, F3, and F6.

HYDROLOGY

Wetland Hydrology Indicators:

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

Field Observations:

Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>22</u>	
Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>19</u>	

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

Remarks:
Hydrology criteria met directly through primary indicator C3.

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 10/31/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-18
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 7
 Subregion (LRR): A2 Lat: 48.183555 Long: -122.10267832 Datum: WGS 84
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: N/A

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 <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p align="center">No wetland criteria met. Data collected in west of Wetland F.</p>	

VEGETATION – Use scientific names of plants.

	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	
Tree Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
Herb Stratum (Plot size: <u>10 ft</u>)				
1. <u>Plantago lanceolata</u>	<u>35</u>	<u>Yes</u>	<u>FACU</u>	
2. <u>Agrostis capillaris</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>	
3. <u>Hieracium sp.*</u>	<u>12</u>	<u>No</u>	<u>FAC</u>	
4. <u>Ranunculus repens</u>	<u>10</u>	<u>No</u>	<u>FAC</u>	
5. <u>Taraxacum officinale</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
6. <u>Leucanthemum vulgare</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
7. <u>Dactylis glomerata</u>	<u>3</u>	<u>No</u>	<u>FACU</u>	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
	<u>100</u>	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>0</u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
 Total Number of Dominant Species Across All Strata: 2 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by:
 OBL species _____ x 1 = _____
 FACW species _____ x 2 = _____
 FAC species _____ x 3 = _____
 FACU species _____ x 4 = _____
 UPL species _____ x 5 = _____
 Column Totals: _____ (A) _____ (B)
 Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
 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
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No

Remarks: **No hydrophytic vegetation criteria met. Dominance test failed, prevalence index not warranted due to lack of combined hydric soil and hydrology. *could not be identified to species, presumed FAC for scoring purposes**

SOIL

Sampling Point: DP-18

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 3	10YR 3/3	100	-	-	-	-	SiLo	Silt loam
3 - 8	10YR 3/4	100	-	-	-	-	GrLo	Gravelly loam
8 - 10	10YR 2/2	100	-	-	-	-	GrLo	Gravelly loam
10 - 14	7.5YR 4/3	75	-	-	-	-	GrSaLo	Gravelly sandy loam, mixed matrix
	7.5YR 4/4	25	-	-	-	-	GrSaLo	Gravelly sandy loam, mixed matrix
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)						Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/> Histosol (A1)			<input type="checkbox"/> Sandy Redox (S5)			<input type="checkbox"/> 2 cm Muck (A10)		
<input type="checkbox"/> Histic Epipedon (A2)			<input type="checkbox"/> Stripped Matrix (S6)			<input type="checkbox"/> Red Parent Material (TF2)		
<input type="checkbox"/> Black Histic (A3)			<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)			<input type="checkbox"/> Very Shallow Dark Surface (TF12)		
<input type="checkbox"/> Hydrogen Sulfide (A4)			<input type="checkbox"/> Loamy Gleyed Matrix (F2)			<input type="checkbox"/> Other (Explain in Remarks)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)			<input type="checkbox"/> Depleted Matrix (F3)			³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.		
<input type="checkbox"/> Thick Dark Surface (A12)			<input type="checkbox"/> Redox Dark Surface (F6)					
<input type="checkbox"/> Sandy Mucky Mineral (S1)			<input type="checkbox"/> Depleted Dark Surface (F7)					
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			<input type="checkbox"/> Redox Depressions (F8)					
Restrictive Layer (if present): Type: <u>N/A</u> Depth (inches): <u>--</u>						Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Remarks: No hydric soil criteria met.								

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>		
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>		
Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>		
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No hydrology criteria met.			

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 10/31/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-19
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 2
 Subregion (LRR): A2 Lat: 48.185642 Long: -122.11110645 Datum: WGS 84
 Soil Map Unit Name: Pastik silt loam, 8 to 25 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p align="center">Not all three wetland criteria met, only hydrophytic vegetation criteria met. Data collected north of Wetland G.</p>	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30 ft</u>)				
1. <u>Thuja plicata</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67%</u> (A/B)
2. <u>Tsuga heterophylla</u>	<u>25</u>	<u>Yes</u>	<u>FACU</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>50</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)				
1. <u>Rubus spectabilis</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
2. <u>Sambucus racemosa</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>	
3. <u>Ilex aquifolium</u>	<u>2</u>	<u>No</u>	<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>22</u>	= Total Cover		
Herb Stratum (Plot size: <u>10 ft</u>)				
1. <u>Athyrium cylorsorum</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Tolmeia mensiezii</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>	
3. <u>Carex sp.*</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
4. <u>Dryopteris expansa</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
5. <u>Galium aparaine</u>	<u>2</u>	<u>No</u>	<u>FACU</u>	
6. <u>Urtica dioica</u>	<u>2</u>	<u>No</u>	<u>FAC</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
	<u>94</u>	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>6</u>				

Remarks:
 Hydrophytic vegetation criteria met through dominance test.
 *Could not be identified to species, assigned FAC for scoring purposes based on genus.

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 10/31/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-20
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR): A2 Lat: 48.185619 Long: -122.11133788 Datum: WGS 84
 Soil Map Unit Name: Pastik silt loam, 8 to 25 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center">All three wetland criteria met. Data collected in Wetland G.</p>	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30 ft</u>)					
1. <u>Alnus rubra</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
<u>20</u> = Total Cover					
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)					
1. <u>Rubus spectabilis</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
<u>5</u> = Total Cover					
Herb Stratum (Plot size: <u>10 ft</u>)					
1. <u>Athyrium cyclosorum</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>		
2. <u>Lysichiton americanus</u>	<u>15</u>	<u>Yes</u>	<u>OBL</u>		
3. <u>Equisetum arvense</u>	<u>2</u>	<u>No</u>	<u>FAC</u>		
4. <u>Urtica dioica</u>	<u>1</u>	<u>No</u>	<u>FAC</u>		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
<u>38</u> = Total Cover					
Woody Vine Stratum (Plot size: <u>30 ft</u>)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
<u>0</u> = Total Cover					
% Bare Ground in Herb Stratum <u>62</u>					

Remarks: Hydrophytic vegetation criteria met through dominance test.

SOIL

Sampling Point: DP-20

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0 - 3	10YR 2/1	100	-	-	-	-	SiLo	Silt loam
3 - 6	2.5Y 4/2	98	7.5YR 4/6	2	C	M	LofiSa	Loamy fine sand
6 - 12	10YR 3/1	93	7.5YR 3/4	7	C	M/PL	SiLo	Silt loam
12 - 14	2.5Y 4/1	95	7.5YR 3/4	5	C	M/PL	SiLo	Silt loam
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)						Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)		<input type="checkbox"/> 2 cm Muck (A10)			<input type="checkbox"/> Red Parent Material (TF2)		
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)		<input type="checkbox"/> Red Parent Material (TF2)			<input type="checkbox"/> Very Shallow Dark Surface (TF12)		
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)		<input type="checkbox"/> Other (Explain in Remarks)			<input type="checkbox"/> Other (Explain in Remarks)		
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)		<input type="checkbox"/> Other (Explain in Remarks)			<input type="checkbox"/> Other (Explain in Remarks)		
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)		<input type="checkbox"/> Other (Explain in Remarks)			<input type="checkbox"/> Other (Explain in Remarks)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)		<input type="checkbox"/> Other (Explain in Remarks)			<input type="checkbox"/> Other (Explain in Remarks)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)		<input type="checkbox"/> Other (Explain in Remarks)			<input type="checkbox"/> Other (Explain in Remarks)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)		<input type="checkbox"/> Other (Explain in Remarks)			<input type="checkbox"/> Other (Explain in Remarks)		
Restrictive Layer (if present):						Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Type: <u>N/A</u>								
Depth (inches): <u>--</u>								
Remarks: Hydric soil criteria met through indicators A11 and F6.								

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>		
Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>26</u>		
Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>23</u>		
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: Hydrology criteria met directly through primary indicator C3.			

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/1/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-21E
 Investigator(s): Casey Lanier, Catherine Mills Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Cone Slope (%): 3
 Subregion (LRR): A2 Lat: 48.181860 Long: -122.10836834 Datum: WGS 84
 Soil Map Unit Name: Tokul-Winston gravelly loams, 25 to 65 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Not all three wetland criteria met, only hydrophytic vegetation criteria met. Data collected east of Wetland I. Inadvertently assigned a duplicate DP number, therefore labeled "DP-21E" where "E" indicates east.	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: 30 ft)				
1. <u>Tsuga heterophylla</u>	<u>45</u>	<u>Yes</u>	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>45</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: 30 ft)				
1. <u>Rubus spectabilis</u>	<u>70</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>70</u> = Total Cover				
Herb Stratum (Plot size: 10 ft)				
1. <u>Polystichum munitum</u>	<u>25</u>	<u>Yes</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Dryopteris expansa</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>	
3. <u>Athyrium cyclorsorum</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>50</u> = Total Cover				
Woody Vine Stratum (Plot size: 30 ft)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. _____	_____	_____	_____	
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>15</u>				

Remarks: **Hydrophytic vegetation criteria met through dominance test. Moss ground cover 35%**

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/8/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-21W
 Investigator(s): Garrett Jordan, Casey Lanier Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 2
 Subregion (LRR): A2 Lat: 48.181591 Long: -122.11100140 Datum: WGS 84
 Soil Map Unit Name: Tokul gravelly medial loam, 15 to 30 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Not all three wetland criteria met, only hydrophytic vegetation criteria met. Data collected north of Wetland J and Stream Z. Inadvertently assigned a duplicate DP number, therefore labeled "DP-21W" where "W" indicates west.	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: 30 ft)					
1. <u>Tsuga heterophylla</u>	<u>35</u>	<u>Yes</u>	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60%</u> (A/B)	
2. <u>Populus balsamifera</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>		
3. _____					
4. _____					
	<u>45</u>	= Total Cover			
Sapling/Shrub Stratum (Plot size: 30 ft)					
1. <u>Rubus spectabilis</u>	<u>60</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
2. <u>Sambucus racemosa</u>	<u>1</u>	<u>No</u>	<u>FACU</u>		
3. _____					
4. _____					
5. _____					
	<u>61</u>	= Total Cover			
Herb Stratum (Plot size: 10 ft)					
1. <u>Polystichum munitum</u>	<u>35</u>	<u>Yes</u>	<u>FACU</u>		
2. <u>Ranunculus repens</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>		
3. <u>Dryopteris expansa</u>	<u>10</u>	<u>No</u>	<u>FAC</u>		
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
	<u>65</u>	= Total Cover			
Woody Vine Stratum (Plot size: 30 ft)					
1. _____					
2. _____					
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>35</u>					

Remarks: **Hydrophytic vegetation criteria met through dominance test.**

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/1/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-22E
 Investigator(s): Casey Lanier, Catherine Mills Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Toe of slope Local relief (concave, convex, none): None Slope (%): 1
 Subregion (LRR): A2 Lat: 48.181839 Long: -122.10829705 Datum: WGS 84
 Soil Map Unit Name: Tokul-Winston gravelly loams, 25 to 65 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: All three wetland criteria met. Data collected in Wetland I. Inadvertently assigned a duplicate DP number, therefore labeled "DP-22E" where "E" indicates east.	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
				0 = Total Cover
<u>Sapling/Shrub Stratum</u> (Plot size: <u>30 ft</u>)				
1. <u>Rubus spectabilis</u>	<u>70</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Acer circinatum</u>	<u>15</u>	<u>No</u>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
				85 = Total Cover
<u>Herb Stratum</u> (Plot size: <u>10 ft</u>)				
1. <u>Ranunculus repens</u>	<u>45</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Athyrium cylorsorum</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>	
3. <u>Tolmeia mensiezii</u>	<u>10</u>	<u>No</u>	<u>FAC</u>	
4. <u>Tiarella trifoliata</u>	<u>10</u>	<u>No</u>	<u>FAC</u>	
5. <u>Nasturtium officinale</u>	<u>5</u>	<u>No</u>	<u>OBL</u>	
6. <u>Lysichiton americanus</u>	<u>5</u>	<u>No</u>	<u>OBL</u>	
7. <u>Polystichum munitum</u>	<u>1</u>	<u>No</u>	<u>FACU</u>	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
				96 = Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
				0 = Total Cover
% Bare Ground in Herb Stratum <u>15</u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
 Total Number of Dominant Species Across All Strata: 3 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by:
 OBL species _____ x 1 = _____
 FACW species _____ x 2 = _____
 FAC species _____ x 3 = _____
 FACU species _____ x 4 = _____
 UPL species _____ x 5 = _____
 Column Totals: _____ (A) _____ (B)
 Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
 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
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Remarks: Hydrophytic vegetation criteria met through dominance test.	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---	--

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/8/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-22W
 Investigator(s): Garrett Jordan, Casey Lanier Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 5
 Subregion (LRR): A2 Lat: 48.181490 Longitude Long: -122.11086754 Datum: WGS 84
 Soil Map Unit Name: Tokul gravelly medial loam, 15 to 30 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Al three wetland criteria met. Data collected in Wetland J. Inadvertently assigned a duplicate DP number, therefore labeled "DP-22W" where "W" indicates west.	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
<u>Sapling/Shrub Stratum</u> (Plot size: <u>30 ft</u>)				
1. <u>Rubus spectabilis</u>	<u>75</u>	<u>Yes</u>	<u>FAC</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>75</u> = Total Cover				
<u>Herb Stratum</u> (Plot size: <u>10 ft</u>)				Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Tolmeia mensiezii</u>	<u>50</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Polystichum munitum</u>	<u>10</u>	<u>No</u>	<u>FACU</u>	
3. <u>Athyrium cyclosorum</u>	<u>3</u>	<u>No</u>	<u>FAC</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>63</u> = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>37</u>				

Remarks: **Hydrophytic vegetation criteria met through dominance test.**

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/1/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-23E
 Investigator(s): Casey Lanier, Catherine Mills Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope (%): 0
 Subregion (LRR): A2 Lat: 48.181780 Long: -122.10822910 Datum: WGS 84
 Soil Map Unit Name: Tokul-Winston gravelly loams, 25 to 65 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Not all three wetland criteria met, only hydrophytic vegetation criteria met. Data collected east of Wetland H. Inadvertently assigned a duplicate DP number, therefore labeled "DP-23E" where "E" indicates east.	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
				<u>0</u> = Total Cover
<u>Sapling/Shrub Stratum</u> (Plot size: <u>30 ft</u>)				
1. <u>Acer circinatum</u>	<u>70</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Rubus spectabilis</u>	<u>15</u>	<u>No</u>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
				<u>85</u> = Total Cover
<u>Herb Stratum</u> (Plot size: <u>10 ft</u>)				
1. <u>Tolmeia mensiezii</u>	<u>60</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Polystichum munitum</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	
3. <u>Athyrium cyclorsorum</u>	<u>2</u>	<u>No</u>	<u>FAC</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
				<u>67</u> = Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
				<u>0</u> = Total Cover
<u>% Bare Ground in Herb Stratum</u> <u>33</u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
 Total Number of Dominant Species Across All Strata: 2 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by:
 OBL species _____ x 1 = _____
 FACW species _____ x 2 = _____
 FAC species _____ x 3 = _____
 FACU species _____ x 4 = _____
 UPL species _____ x 5 = _____
 Column Totals: _____ (A) _____ (B)
 Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
 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
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No

Remarks: **Hydrophytic vegetation criteria met through dominance test.**

SOIL

Sampling Point: DP-23E

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0 - 2	10YR 2/1	100	-	-	-	-	Loam	Loam with organics
2 - 10	2.5Y 3/3	100	-	-	-	-	LoSa	Loamy sand
10 - 16	2.5Y 4/3	100	-	-	-	-	LoSa	Loamy sand
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)						Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/> Histosol (A1)			<input type="checkbox"/> Sandy Redox (S5)			<input type="checkbox"/> 2 cm Muck (A10)		
<input type="checkbox"/> Histic Epipedon (A2)			<input type="checkbox"/> Stripped Matrix (S6)			<input type="checkbox"/> Red Parent Material (TF2)		
<input type="checkbox"/> Black Histic (A3)			<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)			<input type="checkbox"/> Very Shallow Dark Surface (TF12)		
<input type="checkbox"/> Hydrogen Sulfide (A4)			<input type="checkbox"/> Loamy Gleyed Matrix (F2)			<input type="checkbox"/> Other (Explain in Remarks)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)			<input type="checkbox"/> Depleted Matrix (F3)			³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.		
<input type="checkbox"/> Thick Dark Surface (A12)			<input type="checkbox"/> Redox Dark Surface (F6)					
<input type="checkbox"/> Sandy Mucky Mineral (S1)			<input type="checkbox"/> Depleted Dark Surface (F7)					
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			<input type="checkbox"/> Redox Depressions (F8)					
<input type="checkbox"/> Restrictive Layer (if present): Type: <u>N/A</u> Depth (inches): <u>--</u>								
Remarks: No hydric soil criteria met.								

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:			
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<u>None</u>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<u>None</u>
Saturation Present? (includes capillary fringe)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<u>None</u>
		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No hydrology criteria met.			

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/8/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-23W
 Investigator(s): Garrett Jordan, Casey Lanier Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR): A2 Lat: 48.182091 Long: -122.11181951 Datum: WGS 84
 Soil Map Unit Name: Tokul gravelly medial loam, 15 to 30 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Not all three wetland criteria met, only hydrophytic vegetation criteria met. Data collected west of Wetland K. Inadvertently assigned a duplicate DP number, therefore labeled "DP-23W" where "W" indicates west.	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
				<u>0</u> = Total Cover
<u>Sapling/Shrub Stratum</u> (Plot size: <u>30 ft</u>)				
1. <u>Rubus spectabilis</u>	<u>90</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Sambucus racemosa</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	
3. <u>Acer macrophyllum</u>	<u>2</u>	<u>No</u>	<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
				<u>97</u> = Total Cover
<u>Herb Stratum</u> (Plot size: <u>10 ft</u>)				
1. <u>Urtica dioica</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Tolmeia menziesii</u>	<u>4</u>	<u>No</u>	<u>FAC</u>	
3. <u>Polystichum munitum</u>	<u>3</u>	<u>No</u>	<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
				<u>37</u> = Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
				<u>0</u> = Total Cover
<u>% Bare Ground in Herb Stratum</u> <u>63</u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
 Total Number of Dominant Species Across All Strata: 2 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by:
 OBL species _____ x 1 = _____
 FACW species _____ x 2 = _____
 FAC species _____ x 3 = _____
 FACU species _____ x 4 = _____
 UPL species _____ x 5 = _____
 Column Totals: _____ (A) _____ (B)
 Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
 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
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No

Remarks: **Hydrophytic vegetation criteria met through dominance test.**

SOIL

Sampling Point: DP-23W

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 9	10YR 2/1	100	-	-	-	-	SiLo	Silt loam
9 - 15+	10YR 3/3	97	7.5YR 4/4	3	C	M	SiLo	Silt loam

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

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

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks)		
³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.		

Restrictive Layer (if present):
 Type: N/A
 Depth (inches): --

Hydric Soil Present? Yes No

Remarks:
 No hydric soil criteria met.

HYDROLOGY

Wetland Hydrology Indicators:

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

Field Observations:

Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>	
Saturation Present? (includes capillary fringe)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>	

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

Remarks:
 No hydrology criteria met.

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/8/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-24
 Investigator(s): Garrett Jordan, Casey Lanier Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0
 Subregion (LRR): A2 Lat: 48.182188 Long: -122.11165961 Datum: WGS 84
 Soil Map Unit Name: Tokul gravelly medial loam, 15 to 30 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center">At three wetland criteria met. Data collected in Wetland K.</p>	

VEGETATION – Use scientific names of plants.

	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	
Tree Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)				
1. <u>Rubus spectabilis</u>	<u>90</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Sambucus racemosa</u>	<u>10</u>	<u>No</u>	<u>FACU</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>100</u>	= Total Cover		
Herb Stratum (Plot size: <u>10 ft</u>)				
1. <u>Tolmeia mensiezii</u>	<u>90</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Carex obnupta</u>	<u>5</u>	<u>No</u>	<u>OBL</u>	
3. <u>Athyrium cyclosorum</u>	<u>4</u>	<u>No</u>	<u>FAC</u>	
4. <u>Equisetum arvense</u>	<u>1</u>	<u>No</u>	<u>FAC</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
	<u>100</u>	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>0</u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
 Total Number of Dominant Species Across All Strata: 2 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by:
 OBL species _____ x 1 = _____
 FACW species _____ x 2 = _____
 FAC species _____ x 3 = _____
 FACU species _____ x 4 = _____
 UPL species _____ x 5 = _____
 Column Totals: _____ (A) _____ (B)
 Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
 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
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Remarks: Hydrophytic vegetation criteria met through dominance test.

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/9/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-25
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Toe of slope Local relief (concave, convex, none): Concave Slope (%): 3
 Subregion (LRR): A2 Lat: 48.183107 Long: -122.11178955 Datum: WGS 84
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <u>Not all three wetland criteria met, only hydrophytic vegetation criteria met. Data collected along edge of Stream Y in the base of a ravine. This area is likely highly influenced by the adjacent stream, however, the soils appear to drain well enough to preclude wetland conditions from forming.</u>	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
<u>Sapling/Shrub Stratum</u> (Plot size: <u>30 ft</u>)				
1. <u>Rubus spectabilis</u>	<u>35</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Ribes bracteosum</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>	
3. <u>Sambucus racemosa</u>	<u>1</u>	<u>No</u>	<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>51</u> = Total Cover				
<u>Herb Stratum</u> (Plot size: <u>10 ft</u>)				
1. <u>Tolmeia mensiezii</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Dryopteris expansa</u>	<u>3</u>	<u>No</u>	<u>FAC</u>	
3. <u>Polystichum munitum</u>	<u>2</u>	<u>No</u>	<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>45</u> = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>55</u>				

Remarks: Hydrophytic vegetation criteria met through dominance test.

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/9/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-26
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Toe of slope Local relief (concave, convex, none): Concave Slope (%): 3
 Subregion (LRR): A2 Lat: 48.183291 Long: -122.11168318 Datum: WGS 84
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <u>Not all three wetland criteria met, lacking hydric soils. Data collected along edge of Stream Y in the base of a ravine. This area has fluctuating hydrology, however, the soils appear to drain well enough and water is likely oxygenated enough to preclude wetland conditions from forming.</u>	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
				<u>0</u> = Total Cover
<u>Sapling/Shrub Stratum</u> (Plot size: <u>30 ft</u>)				
1. <u>Rubus spectabilis</u>	<u>50</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Ribes bracteosum</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
				<u>70</u> = Total Cover
<u>Herb Stratum</u> (Plot size: <u>10 ft</u>)				
1. <u>Tolmeia mensiezii</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Dryopteris expansa</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
3. <u>Polystichum munitum</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	
4. <u>Adiantum aleuticum</u>	<u>1</u>	<u>No</u>	<u>FAC</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
				<u>51</u> = Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
				<u>0</u> = Total Cover
<u>% Bare Ground in Herb Stratum</u> <u>49</u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
 Total Number of Dominant Species Across All Strata: 3 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by:
 OBL species _____ x 1 = _____
 FACW species _____ x 2 = _____
 FAC species _____ x 3 = _____
 FACU species _____ x 4 = _____
 UPL species _____ x 5 = _____
 Column Totals: _____ (A) _____ (B)
 Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
 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
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No

Remarks: Hydrophytic vegetation criteria met through dominance test.

SOIL

Sampling Point: DP-26

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 3	10YR 2/2	100	-	-	-	-	SaLo	Sandy loam
3 - 8	10YR 3/2	97	2.5Y 4/2	3	D	M	GrSaLo	Gravelly sandy loam with cobble
8 - 12	2.5Y 4/2	100	-	-	-	-	SiLo	Silt loam
12 - 15	10YR 4/2	100	-	-	-	-	vGrSaLo	Very gravelly sandy loam
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)						Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/> Histosol (A1)			<input type="checkbox"/> Sandy Redox (S5)			<input type="checkbox"/> 2 cm Muck (A10)		
<input type="checkbox"/> Histic Epipedon (A2)			<input type="checkbox"/> Stripped Matrix (S6)			<input type="checkbox"/> Red Parent Material (TF2)		
<input type="checkbox"/> Black Histic (A3)			<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)			<input type="checkbox"/> Very Shallow Dark Surface (TF12)		
<input type="checkbox"/> Hydrogen Sulfide (A4)			<input type="checkbox"/> Loamy Gleyed Matrix (F2)			<input type="checkbox"/> Other (Explain in Remarks)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)			<input type="checkbox"/> Depleted Matrix (F3)			³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.		
<input type="checkbox"/> Thick Dark Surface (A12)			<input type="checkbox"/> Redox Dark Surface (F6)					
<input type="checkbox"/> Sandy Mucky Mineral (S1)			<input type="checkbox"/> Depleted Dark Surface (F7)					
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			<input type="checkbox"/> Redox Depressions (F8)					
Restrictive Layer (if present):						Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Type: <u>N/A</u>								
Depth (inches): <u>--</u>								
Remarks: No hydric soil criteria met. Depletions in section layer do not meet F7 requirements in color or abundance. No depleted matrix present as no redox concentrations are present within the third layer's matrix. Hydric soils likely have not formed because the soil drains well enough and/or because the water is well oxygenated due to flow, precluding reduced conditions from forming.								

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<u>None</u>
Water Table Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<u>13</u>
Saturation Present? (includes capillary fringe)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<u>12</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: Hydrology criteria met directly through primary indicator A3. Given it's location at the toe of a steep ravine and immediately adjacent to Stream Y, this area appears to be highly influenced by precipitation and stream flows and may experience frequent, but temporary fluctuations in the water table. The water is likely well oxygenated due to flow.			

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/9/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-27
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope (%): 0
 Subregion (LRR): A2 Lat: 48.183481 Long: -122.11176453 Datum: WGS 84
 Soil Map Unit Name: Tokul-Winston gravelly loams, 25 to 65 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center">All three wetland criteria met. Data collected within Wetland L.</p>	

VEGETATION – Use scientific names of plants.

	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	
Tree Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)				
1. <u>Rubus spectabilis</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Ribes bracteosum</u>	<u>10</u>	<u>No</u>	<u>FAC</u>	
3. <u>Oplopanax horridus</u>	<u>8</u>	<u>No</u>	<u>FAC</u>	
4. <u>Rubus armeniacus</u>	<u>2</u>	<u>No</u>	<u>FAC</u>	
5. _____	_____	_____	_____	
	<u>60</u>	= Total Cover		
Herb Stratum (Plot size: <u>10 ft</u>)				
1. <u>Tolmeia mensiezii</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Lysichiton americanus</u>	<u>2</u>	<u>No</u>	<u>OBL</u>	
3. <u>Polystichum munitum</u>	<u>2</u>	<u>No</u>	<u>FACU</u>	
4. <u>Tellima grandiflora</u>	<u>1</u>	<u>No</u>	<u>FACU</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
	<u>30</u>	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>70</u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
 Total Number of Dominant Species Across All Strata: 2 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by:
 OBL species _____ x 1 = _____
 FACW species _____ x 2 = _____
 FAC species _____ x 3 = _____
 FACU species _____ x 4 = _____
 UPL species _____ x 5 = _____
 Column Totals: _____ (A) _____ (B)
 Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
 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
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No

Remarks: Hydrophytic vegetation criteria met through dominance test.

SOIL

Sampling Point: DP-27

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 8	10YR 2/1	100	-	-	-	-	Organic	Muck
8 - 13	10YR 2/1	100	-	-	-	-	Loam	Mucky loam
13 - 15	2.5Y 3/1	100	-	-	-	-	SiLo	Mucky silt loam
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)						Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/> Histosol (A1)			<input type="checkbox"/> Sandy Redox (S5)			<input type="checkbox"/> 2 cm Muck (A10)		
<input type="checkbox"/> Histic Epipedon (A2)			<input type="checkbox"/> Stripped Matrix (S6)			<input type="checkbox"/> Red Parent Material (TF2)		
<input checked="" type="checkbox"/> Black Histic (A3)			<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)			<input type="checkbox"/> Very Shallow Dark Surface (TF12)		
<input checked="" type="checkbox"/> Hydrogen Sulfide (A4)			<input type="checkbox"/> Loamy Gleyed Matrix (F2)			<input type="checkbox"/> Other (Explain in Remarks)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)			<input type="checkbox"/> Depleted Matrix (F3)			³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.		
<input type="checkbox"/> Thick Dark Surface (A12)			<input type="checkbox"/> Redox Dark Surface (F6)					
<input type="checkbox"/> Sandy Mucky Mineral (S1)			<input type="checkbox"/> Depleted Dark Surface (F7)					
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			<input type="checkbox"/> Redox Depressions (F8)					
<input type="checkbox"/> Restrictive Layer (if present): Type: <u>N/A</u> Depth (inches): <u>--</u>			Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					
Remarks: Hydric soil criteria met through indicators A3 and A4.								

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>		
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>		
Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>Surface</u> <small>(includes capillary fringe)</small>		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: Hydrology criteria met directly through primary indicators A3 and C1. Although no water table was noted within the pit, surface water was present immediately adjacent to the sampling location. Water table was likely present, but due to time constraints, the pit was not left open long enough for water table to percolate.			

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/9/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-28
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 5
 Subregion (LRR): A2 Lat: 48.183774 Long: -122.11241498 Datum: WGS 84
 Soil Map Unit Name: Tokul-Winston gravelly loams, 25 to 65 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center">All three wetland criteria met. Data collected within Wetland M.</p>	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30 ft</u>)					
1. <u>Acer macrophyllum</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80%</u> (A/B)	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
<u>10</u> = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)					
1. <u>Rubus spectabilis</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
<u>40</u> = Total Cover					
Herb Stratum (Plot size: <u>10 ft</u>)					
1. <u>Tolmeia mensiezii</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
2. <u>Urtica dioica</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>		
3. <u>Athyrium cyclosorum</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
<u>45</u> = Total Cover					
Woody Vine Stratum (Plot size: <u>30 ft</u>)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
<u>0</u> = Total Cover					
% Bare Ground in Herb Stratum <u>55</u>				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Remarks: <u>Hydrophytic vegetation criteria met through dominance test.</u>					

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/9/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-29
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 5
 Subregion (LRR): A2 Lat: 48.183842 Long: -122.11234134 Datum: WGS 84
 Soil Map Unit Name: Tokul-Winston gravelly loams, 25 to 65 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p align="center">Not all three wetland criteria met, only hydrophytic vegetation. Data collected between Wetland L and Wetland M.</p>	

VEGETATION – Use scientific names of plants.

	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	
Tree Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)				
1. <u>Rubus spectabilis</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>30</u>	= Total Cover		
Herb Stratum (Plot size: <u>10 ft</u>)				
1. <u>Tolmeia mensiezii</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Urtica dioica</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>	
3. <u>Polystichum munitum</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
	<u>15</u>	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>85</u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
 Total Number of Dominant Species Across All Strata: 4 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 75% (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by:
 OBL species _____ x 1 = _____
 FACW species _____ x 2 = _____
 FAC species _____ x 3 = _____
 FACU species _____ x 4 = _____
 UPL species _____ x 5 = _____
 Column Totals: _____ (A) _____ (B)
 Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
 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
 Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
--

Remarks: Hydrophytic vegetation criteria met through dominance test.

SOIL

Sampling Point: DP-29

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 10	2.5Y 3/2	100	-	-	-	-	GrSiCilo	Gravelly silty clay loam
10 - 15	2.5Y 5/3	96	10YR 5/4	2	C	M	GrCilo	Gravelly clay loam
			2.5Y 6/1	2	D	M		
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)						Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/> Histosol (A1)			<input type="checkbox"/> Sandy Redox (S5)			<input type="checkbox"/> 2 cm Muck (A10)		
<input type="checkbox"/> Histic Epipedon (A2)			<input type="checkbox"/> Stripped Matrix (S6)			<input type="checkbox"/> Red Parent Material (TF2)		
<input type="checkbox"/> Black Histic (A3)			<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)			<input type="checkbox"/> Very Shallow Dark Surface (TF12)		
<input type="checkbox"/> Hydrogen Sulfide (A4)			<input type="checkbox"/> Loamy Gleyed Matrix (F2)			<input type="checkbox"/> Other (Explain in Remarks)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)			<input type="checkbox"/> Depleted Matrix (F3)			³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.		
<input type="checkbox"/> Thick Dark Surface (A12)			<input type="checkbox"/> Redox Dark Surface (F6)					
<input type="checkbox"/> Sandy Mucky Mineral (S1)			<input type="checkbox"/> Depleted Dark Surface (F7)					
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			<input type="checkbox"/> Redox Depressions (F8)					
Restrictive Layer (if present):						Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Type: <u>N/A</u>								
Depth (inches): <u>--</u>								
Remarks: No hydric soil criteria met.								

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>		
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>		
Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>		
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No hydrology criteria met.			

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/10/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-30
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 15
 Subregion (LRR): A2 Lat: 48.184650 Long: -122.10904115 Datum: WGS 84
 Soil Map Unit Name: Tokul-Winston gravelly loams, 25 to 65 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center">All three wetland criteria met. Data collected within Wetland O.</p>	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
				<u>0</u> = Total Cover
<u>Sapling/Shrub Stratum</u> (Plot size: <u>30 ft</u>)				
1. <u>Rubus spectabilis</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Oplopanax horridus</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
3. <u>Ribes bracteosum</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
				<u>40</u> = Total Cover
<u>Herb Stratum</u> (Plot size: <u>10 ft</u>)				
1. <u>Polystichum munitum</u>	<u>30</u>	<u>Yes</u>	<u>FACU</u>	
2. <u>Tolmeia mensiezii</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>	
3. <u>Athyrium cyclosorum</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
				<u>50</u> = Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
				<u>0</u> = Total Cover
% Bare Ground in Herb Stratum <u>50</u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
 Total Number of Dominant Species Across All Strata: 3 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by:
 OBL species _____ x 1 = _____
 FACW species _____ x 2 = _____
 FAC species _____ x 3 = _____
 FACU species _____ x 4 = _____
 UPL species _____ x 5 = _____
 Column Totals: _____ (A) _____ (B)
 Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
 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
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No

Remarks: Hydrophytic vegetation criteria met through dominance test.

SOIL

Sampling Point: DP-30

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 4	10YR 2/1	100	-	-	-	-	Loam	Mucky loam
4 - 12	5Y 5/1	95	10YR 5/6	5	C	M	SaCILo	Sandy clay loam
12 - 15+	10Y 4/1	100	-	-	-	-	vfiSaLo	Very fine sandy loam, charcoal and decomp. wood

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

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

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Black Histic (A3)	<input checked="" type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input checked="" type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

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

Restrictive Layer (if present):
Type: N/A
Depth (inches): --

Hydric Soil Present? Yes No

Remarks:
Hydric soil criteria met through indicators F1, F2, and F3.

HYDROLOGY

Wetland Hydrology Indicators:

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

Field Observations:

Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>13</u>	
Saturation Present? (includes capillary fringe)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>11</u>	

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

Remarks:
Hydrology criteria met directly through primary indicator A3. Episaturation also noted from 0 to 5 inches BGS likely due to recent precipitation/surface runoff.

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/10/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-31
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 15
 Subregion (LRR): A2 Lat: 48.184742 Long: -122.10915395 Datum: WGS 84
 Soil Map Unit Name: Tokul-Winston gravelly loams, 25 to 65 percent slopes NWI classification: N/A

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 <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p align="center">No wetland criteria met. Data collected between Wetland B and Wetland O.</p>	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30 ft</u>)					
1. <u>Thuja plicata</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>40%</u> (A/B)	
2. <u>Tsuga heterophylla</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>		
3. _____					
4. _____					
	<u>25</u>	= Total Cover			
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)					
1. <u>Corylus cornuta</u>	<u>30</u>	<u>Yes</u>	<u>FACU</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
2. <u>Rubus spectabilis</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>		
3. _____					
4. _____					
5. _____					
	<u>50</u>	= Total Cover			
Herb Stratum (Plot size: <u>10 ft</u>)					
1. <u>Polystichum munitum</u>	<u>40</u>	<u>Yes</u>	<u>FACU</u>		
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
	<u>40</u>	= Total Cover			
Woody Vine Stratum (Plot size: <u>30 ft</u>)					
1. _____					
2. _____					
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>60</u>					

Remarks: **No hydrophytic vegetation criteria met. Dominance test failed, prevalence index not warranted due to lack of combined hydric soil and hydrology.**

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/10/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-32
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 15
 Subregion (LRR): A2 Lat: 48.182899 Long: -122.10845717 Datum: WGS 84
 Soil Map Unit Name: Tokul-Winston gravelly loams, 25 to 65 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Not all three wetland criteria met, only hydrophytic vegetation. Data collected in south of Wetland O and west of Stream Y and Wetland D/H.	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30 ft</u>)				
1. <u>Thuja plicata</u>	<u>30</u>	Yes	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____	<u>30</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)				
1. <u>Acer circinatum</u>	<u>25</u>	Yes	FAC	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
2. <u>Rubus spectabilis</u>	<u>5</u>	No	FAC	
3. <u>Sambucus racemosa</u>	<u>5</u>	No	FACU	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____	<u>35</u>	= Total Cover		
Herb Stratum (Plot size: <u>10 ft</u>)				
1. <u>Polystichum munitum</u>	<u>40</u>	Yes	FACU	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Athyrium cyclosorum</u>	<u>5</u>	No	FAC	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____	<u>45</u>	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. _____	_____	_____	_____	
_____	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>55</u>				

Remarks: **Hydrophytic vegetation criteria met through dominance test.**

SOIL

Sampling Point: DP-32

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	10YR 2/2	100	-	-	-	-	SaLo	Sandy loam
2 - 10	10YR 3/3	100	-	-	-	-	SaLo	Sandy loam
10 -16	7.5YR 3/4	100	-	-	-	-	SaLo	Sandy loam with charcoal
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)						Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/> Histosol (A1)			<input type="checkbox"/> Sandy Redox (S5)			<input type="checkbox"/> 2 cm Muck (A10)		
<input type="checkbox"/> Histic Epipedon (A2)			<input type="checkbox"/> Stripped Matrix (S6)			<input type="checkbox"/> Red Parent Material (TF2)		
<input type="checkbox"/> Black Histic (A3)			<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)			<input type="checkbox"/> Very Shallow Dark Surface (TF12)		
<input type="checkbox"/> Hydrogen Sulfide (A4)			<input type="checkbox"/> Loamy Gleyed Matrix (F2)			<input type="checkbox"/> Other (Explain in Remarks)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)			<input type="checkbox"/> Depleted Matrix (F3)			³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.		
<input type="checkbox"/> Thick Dark Surface (A12)			<input type="checkbox"/> Redox Dark Surface (F6)					
<input type="checkbox"/> Sandy Mucky Mineral (S1)			<input type="checkbox"/> Depleted Dark Surface (F7)					
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			<input type="checkbox"/> Redox Depressions (F8)					
Restrictive Layer (if present): Type: <u>N/A</u> Depth (inches): <u>--</u>								
Remarks: No hydric soil criteria met.								

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:			
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<u>None</u>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<u>None</u>
Saturation Present? (includes capillary fringe)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<u>None</u>
		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No hydrology criteria met.			

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/10/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-33
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 1
 Subregion (LRR): A2 Lat: 48.186156 Long: -122.11098163 Datum: WGS 84
 Soil Map Unit Name: Pastik silt loam, 8 to 25 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Not all three wetland criteria met, only hydrophytic vegetation. Data collected in northwest portion of the site in area that has become overgrown with non-native invasive understory species.	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30 ft</u>)					
1. <u>Alnus rubra</u>	<u>35</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
_____	<u>35</u>	= Total Cover			
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)					
1. <u>Rubus armeniacus</u>	<u>70</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
2. <u>Carex leptopoda</u>	<u>2</u>	<u>No</u>	<u>FAC</u>		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
_____	<u>72</u>	= Total Cover			
Herb Stratum (Plot size: <u>10 ft</u>)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
_____	<u>0</u>	= Total Cover			
Woody Vine Stratum (Plot size: <u>30 ft</u>)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
_____	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>100</u>					

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
 Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present? Yes No

Remarks: **Hydrophytic vegetation criteria met through dominance test. Carex leptopoda included with shrubs due to herbaceous cover being <5%.**

SOIL

Sampling Point: DP-33

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0 - 10	10YR 2/2	100	-	-	-	-	SiLo	Silt loam
10 - 14	10YR 3/3	90	10YR 4/6	5	C	M	SiLo	Silt loam
			10YR 5/2	5	D	M		

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/10/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-34
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope (%): 1
 Subregion (LRR): A2 Lat: 48.186148 Long: -122.11204903 Datum: WGS 84
 Soil Map Unit Name: Norma loam NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Not all three wetland criteria met, lacking hydric soils. Data collected in northwest portion of the site in area historically cleared and dominated with non-native invasive understory species. Hydrology likely exaggerated due to recent heavy rainfall.	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)				
1. <u>Rubus armeniacus</u>	<u>85</u>	<u>Yes</u>	<u>FAC</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>85</u>	= Total Cover		
Herb Stratum (Plot size: <u>10 ft</u>)				
1. <u>Equisetum arvense</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
	<u>20</u>	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>80</u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
 Total Number of Dominant Species Across All Strata: 2 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by:
 OBL species _____ x 1 = _____
 FACW species _____ x 2 = _____
 FAC species _____ x 3 = _____
 FACU species _____ x 4 = _____
 UPL species _____ x 5 = _____
 Column Totals: _____ (A) _____ (B)
 Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
 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
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No

Remarks: **Hydrophytic vegetation criteria met through dominance test.**

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/10/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-35
 Investigator(s): Kramer Canup Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 5
 Subregion (LRR): A2 Lat: 48.185980 Long: -122.10965304 Datum: WGS 84
 Soil Map Unit Name: Pastik silt loam, 8 to 25 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p align="center">Not all three wetland criteria met, lacking hydric soils. Data collected between Wetland D and Wetland N.</p>	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30 ft</u>)					
1. <u>Alnus rubra</u>	<u>75</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80%</u> (A/B)	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
	<u>75</u>	= Total Cover			
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)					
1. <u>Rubus spectabilis</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
2. <u>Acer circinatum</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>		
3. <u>Sambucus racemosa</u>	<u>7</u>	<u>No</u>	<u>FACU</u>		
4. <u>Sorbus aucuparia</u>	<u>5</u>	<u>No</u>	<u>UPL</u>		
5. <u>Vaccinium parvifolium</u>	<u>2</u>	<u>No</u>	<u>FACU</u>		
	<u>69</u>	= Total Cover			
Herb Stratum (Plot size: <u>10 ft</u>)					
1. <u>Tolmeia mensiezii</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>		
2. <u>Polystichum munitum</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>		
3. <u>Athyrium cyclosorum</u>	<u>5</u>	<u>No</u>	<u>FAC</u>		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
	<u>45</u>	= Total Cover			
Woody Vine Stratum (Plot size: <u>30 ft</u>)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>55</u>					

Remarks: Hydrophytic vegetation criteria met through dominance test.

SOIL

Sampling Point: DP-35

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 6	10YR 3/1	100	-	-	-	-	SiClLo	Silty clay loam
6 - 10	10YR 3/3	77	7.5YR 4/6	3	C	M	SiClLo	Silty clay loam, mixed matrix
	10YR 3/1	20	-	-	-	-	SiClLo	Silty clay loam, mixed matrix
10 - 16	10YR 3/3	85	7.5YR 4/6	5	C	M	SiCl	Silty clay, mixed matrix
	10YR 3/1	5	-	-	-	-	SiClLo	Silty clay loam, mixed matrix
	10YR 5/1	5	-	-	-	-	SaCl	Sandy clay, mixed matrix
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)						Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/> Histosol (A1)			<input type="checkbox"/> Sandy Redox (S5)			<input type="checkbox"/> 2 cm Muck (A10)		
<input type="checkbox"/> Histic Epipedon (A2)			<input type="checkbox"/> Stripped Matrix (S6)			<input type="checkbox"/> Red Parent Material (TF2)		
<input type="checkbox"/> Black Histic (A3)			<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)			<input type="checkbox"/> Very Shallow Dark Surface (TF12)		
<input type="checkbox"/> Hydrogen Sulfide (A4)			<input type="checkbox"/> Loamy Gleyed Matrix (F2)			<input type="checkbox"/> Other (Explain in Remarks)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)			<input type="checkbox"/> Depleted Matrix (F3)			³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.		
<input type="checkbox"/> Thick Dark Surface (A12)			<input type="checkbox"/> Redox Dark Surface (F6)					
<input type="checkbox"/> Sandy Mucky Mineral (S1)			<input type="checkbox"/> Depleted Dark Surface (F7)					
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			<input type="checkbox"/> Redox Depressions (F8)					
Restrictive Layer (if present):								
Type: <u>N/A</u> Depth (inches): <u>--</u>								
Remarks: No hydric soil criteria met.								

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<u>None</u>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<u>None</u>
Saturation Present? (includes capillary fringe)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<u>None</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No hydrology criteria met. No evidence of water table to 20" BGS.			

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/10/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-36
 Investigator(s): Kramer Canup Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 2
 Subregion (LRR): A2 Lat: 48.186073 Long: -122.10962114 Datum: WGS 84
 Soil Map Unit Name: Pastik silt loam, 8 to 25 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center">All three wetland criteria met. Data collected within Wetland N.</p>	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)				
1. <u>Rubus spectabilis</u>	<u>60</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Sambucus racemosa</u>	<u>10</u>	<u>No</u>	<u>FACU</u>	
3. <u>Oemleria cerasiformis</u>	<u>10</u>	<u>No</u>	<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>80</u>	= Total Cover		
Herb Stratum (Plot size: <u>10 ft</u>)				
1. <u>Tolmeia mensiezii</u>	<u>80</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Lysichiton americanus</u>	<u>13</u>	<u>No</u>	<u>OBL</u>	
3. <u>Polystichum munitum</u>	<u>8</u>	<u>No</u>	<u>FACU</u>	
4. <u>Athyrium cyclosorum</u>	<u>7</u>	<u>No</u>	<u>FAC</u>	
5. <u>Urtica dioica</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
6. <u>Equisetum arvense</u>	<u>3</u>	<u>No</u>	<u>FAC</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
	<u>116</u>	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>0</u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
 Total Number of Dominant Species Across All Strata: 2 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by:
 OBL species _____ x 1 = _____
 FACW species _____ x 2 = _____
 FAC species _____ x 3 = _____
 FACU species _____ x 4 = _____
 UPL species _____ x 5 = _____
 Column Totals: _____ (A) _____ (B)
 Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
 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
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No

Remarks: Hydrophytic vegetation criteria met through dominance test.

SOIL

Sampling Point: DP-36

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0 - 9	10YR 2/1	100	-	-	-	-	SiClLo	Silty clay loam
9 - 15	10YR 4/1	75	7.5YR 4/6	10	C	M	SiCl	Silty clay, mixed matrix
	10YR 2/1	15	-	-	-	-	SiClLo	Silty clay loam, mixed matrix
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)						Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/> Histosol (A1)			<input type="checkbox"/> Sandy Redox (S5)			<input type="checkbox"/> 2 cm Muck (A10)		
<input type="checkbox"/> Histic Epipedon (A2)			<input type="checkbox"/> Stripped Matrix (S6)			<input type="checkbox"/> Red Parent Material (TF2)		
<input type="checkbox"/> Black Histic (A3)			<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)			<input type="checkbox"/> Very Shallow Dark Surface (TF12)		
<input type="checkbox"/> Hydrogen Sulfide (A4)			<input type="checkbox"/> Loamy Gleyed Matrix (F2)			<input type="checkbox"/> Other (Explain in Remarks)		
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)			<input checked="" type="checkbox"/> Depleted Matrix (F3)			³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.		
<input type="checkbox"/> Thick Dark Surface (A12)			<input type="checkbox"/> Redox Dark Surface (F6)					
<input type="checkbox"/> Sandy Mucky Mineral (S1)			<input type="checkbox"/> Depleted Dark Surface (F7)					
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			<input type="checkbox"/> Redox Depressions (F8)					
Restrictive Layer (if present):						Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Type: <u>N/A</u>								
Depth (inches): <u>--</u>								
Remarks: Hydric soil criteria met through indicators A11 and F3.								

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<u>None</u>
Water Table Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<u>10</u>
Saturation Present? (includes capillary fringe)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<u>4</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: Hydrology criteria met directly through primary indicators A2 and A3.			

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/10/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-38
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 2
 Subregion (LRR): A2 Lat: 48.185688 Long: -122.11244827 Datum: WGS 84
 Soil Map Unit Name: Pastik silt loam, 8 to 25 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center">All three wetland criteria met. Data collected within Wetland P.</p>	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
				<u>0</u> = Total Cover
<u>Sapling/Shrub Stratum</u> (Plot size: <u>30 ft</u>)				
1. <u>Sambucus racemosa</u>	<u>40</u>	<u>Yes</u>	<u>FACU</u>	
2. <u>Rubus spectabilis</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>	
3. <u>Rubus armeniacus</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
4. <u>Ribes divaricatum</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
5. _____	_____	_____	_____	
				<u>75</u> = Total Cover
<u>Herb Stratum</u> (Plot size: <u>10 ft</u>)				
1. <u>Tolmeia mensiezii</u>	<u>65</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Polystichum munitum</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	
3. <u>Athyrium cyclosorum</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
4. <u>Equisetum arvense</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
				<u>80</u> = Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
				<u>0</u> = Total Cover
<u>% Bare Ground in Herb Stratum</u> <u>20</u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
 Total Number of Dominant Species Across All Strata: 3 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by:
 OBL species _____ x 1 = _____
 FACW species _____ x 2 = _____
 FAC species _____ x 3 = _____
 FACU species _____ x 4 = _____
 UPL species _____ x 5 = _____
 Column Totals: _____ (A) _____ (B)
 Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
 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
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No

Remarks: Hydrophytic vegetation criteria met through dominance test.

SOIL

Sampling Point: DP-38

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0 - 5	10YR 2/2	100	-	-	-	-	SiClLo	Silty clay loam
5 - 12	10YR 3/1	98	10YR 3/4	2	C	M	SiLo	Silt loam
12 - 18	5Y 4/1	93	10YR 3/4	7	C	M	vfiSaLo	Very fine sandy loam
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)						Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/> Histosol (A1)			<input type="checkbox"/> Sandy Redox (S5)			<input type="checkbox"/> 2 cm Muck (A10)		
<input type="checkbox"/> Histic Epipedon (A2)			<input type="checkbox"/> Stripped Matrix (S6)			<input type="checkbox"/> Red Parent Material (TF2)		
<input type="checkbox"/> Black Histic (A3)			<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)			<input type="checkbox"/> Very Shallow Dark Surface (TF12)		
<input type="checkbox"/> Hydrogen Sulfide (A4)			<input type="checkbox"/> Loamy Gleyed Matrix (F2)			<input type="checkbox"/> Other (Explain in Remarks)		
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)			<input type="checkbox"/> Depleted Matrix (F3)			³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.		
<input type="checkbox"/> Thick Dark Surface (A12)			<input checked="" type="checkbox"/> Redox Dark Surface (F6)					
<input type="checkbox"/> Sandy Mucky Mineral (S1)			<input type="checkbox"/> Depleted Dark Surface (F7)					
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			<input type="checkbox"/> Redox Depressions (F8)					
Restrictive Layer (if present): Type: <u>N/A</u> Depth (inches): <u>--</u>			Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					
Remarks: Hydric soil criteria met through indicators A11 and F6.								

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>		
Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>10</u>		
Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <i>(includes capillary fringe)</i>	Depth (inches): <u>6</u>		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: Hydrology criteria met directly through primary indicators A2 and A3.			

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/10/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-39
 Investigator(s): Kramer Canup Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 2
 Subregion (LRR): A2 Lat: 48.187049 Long: -122.11046222 Datum: WGS 84
 Soil Map Unit Name: Ragnar fine sandy loam, 0 to 8 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Not all three wetland criteria met, lacking hydrology. Data collected in northern portion of the site in area that has become overgrown with non-native invasive species. Furthermore, observed hydric soils may not depict contemporary conditions.	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30 ft</u>)				
1. <u>Alnus rubra</u>	<u>90</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____	<u>90</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)				
1. <u>Rubus armeniacus</u>	<u>75</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
2. <u>Rubus spectabilis</u>	<u>15</u>	<u>No</u>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____	<u>90</u>	= Total Cover		
Herb Stratum (Plot size: <u>10 ft</u>)				
1. <u>Equisetum arvense</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Athyrium cyclosorum</u>	<u>3</u>	<u>No</u>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____	<u>23</u>	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. _____	_____	_____	_____	
_____	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>77</u>				

Remarks: **Hydrophytic vegetation criteria met through dominance test.**

SOIL

Sampling Point: DP-39

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0 - 10	10YR 3/1	100	-	-	-	-	SiClLo	Silty clay loam
10 - 12	10YR 3/1	80	10YR 4/1	17	D	M	SiClLo	Silty clay loam with charcoal
			7.5YR 4/6	3	C	M		
12 - 18	10YR 4/1	80	7.5YR 4/6	8	C	M	SiCl	Silty clay, mixed matrix
	10YR 3/1	12	-	-	-	-	SiClLo	Silty clay loam, mixed matrix with charcoal

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input checked="" type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks)
---	---	---

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

Restrictive Layer (if present): Type: <u>N/A</u> Depth (inches): <u>--</u>	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---	---

Remarks:
Hydric soil criteria met through indicator A11. Soils are likely relict due to the historical land use for agriculture and lack of current hydrology.

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) <input type="checkbox"/> Frost-Heave Hummocks (D7)	
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>None</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>None</u> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>None</u> (includes capillary fringe)		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No hydrology criteria met. Pit dug to 20 inches BGS with no evidence of a water table.			

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/10/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-40
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 5
 Subregion (LRR): A2 Lat: 48.185557 Long: -122.11242694 Datum: WGS 84
 Soil Map Unit Name: Pastik silt loam, 8 to 25 percent slopes NWI classification: N/A

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 <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: No wetland criteria met. Data collected in northwest portion of the site in area that has become overgrown with non-native invasive understory species.	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
				<u>0</u> = Total Cover
<u>Sapling/Shrub Stratum</u> (Plot size: <u>30 ft</u>)				
1. <u>Sambucus racemosa</u>	<u>50</u>	<u>Yes</u>	<u>FACU</u>	
2. <u>Rubus spectabilis</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>	
3. <u>Rubus armeniacus</u>	<u>2</u>	<u>No</u>	<u>FAC</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
				<u>92</u> = Total Cover
<u>Herb Stratum</u> (Plot size: <u>10 ft</u>)				
1. <u>Tolmeia mensiezii</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Polystichum munitum</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
				<u>55</u> = Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
				<u>0</u> = Total Cover
% Bare Ground in Herb Stratum <u>45</u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
 Total Number of Dominant Species Across All Strata: 4 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by:
 OBL species _____ x 1 = _____
 FACW species _____ x 2 = _____
 FAC species _____ x 3 = _____
 FACU species _____ x 4 = _____
 UPL species _____ x 5 = _____
 Column Totals: _____ (A) _____ (B)
 Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
 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
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No

Remarks: **No hydrophytic vegetation criteria met. Dominance test failed; prevalence index not warranted due to lack of combined hydric soil and hydrology.**

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/14/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-41
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Toe of slope Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR): A2 Lat: 48.184609 Long: -122.10281917 Datum: WGS 84
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: PEM1C

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center">All three wetland criteria met. Data collected within Wetland Q.</p>	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
				<u>0</u> = Total Cover
<u>Sapling/Shrub Stratum</u> (Plot size: <u>30 ft</u>)				
1. <u>Alnus rubra</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Rubus armeniacus</u>	<u>3</u>	<u>No</u>	<u>FAC</u>	
3. <u>Rubus lacianatus</u>	<u>2</u>	<u>No</u>	<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
				<u>35</u> = Total Cover
<u>Herb Stratum</u> (Plot size: <u>10 ft</u>)				
1. <u>Agrostis capillaris</u>	<u>34</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Holcus lanatus</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>	
3. <u>Ranunculus repens</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>	
4. <u>Schedonorus arundinaceus</u>	<u>10</u>	<u>No</u>	<u>FAC</u>	
5. <u>Geum macrophyllum</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
6. <u>Juncus effusus</u>	<u>2</u>	<u>No</u>	<u>FACW</u>	
7. <u>Lotus corniculatus</u>	<u>1</u>	<u>No</u>	<u>FAC</u>	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
				<u>97</u> = Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
				<u>0</u> = Total Cover
<u>% Bare Ground in Herb Stratum</u> <u>3</u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)
 Total Number of Dominant Species Across All Strata: 4 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by:
 OBL species _____ x 1 = _____
 FACW species _____ x 2 = _____
 FAC species _____ x 3 = _____
 FACU species _____ x 4 = _____
 UPL species _____ x 5 = _____
 Column Totals: _____ (A) _____ (B)
 Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
 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
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Remarks: Hydrophytic vegetation criteria met through dominance test.	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---	--

SOIL

Sampling Point: DP-41

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0 - 7	10YR 2/2	100	-	-	-	-	SiClLo	Silty clay loam
7 - 14	10YR 3/2	92	10YR 5/3	5	C	M	GrSiLo	Gravelly silt loam
			10YR 4/4	3	C	M/PL		

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/14/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-42
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 5
 Subregion (LRR): A2 Lat: 48.184430 Long: -122.10298973 Datum: WGS 84
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p align="center">Not all three wetland criteria met, only hydrophytic vegetation. Data collected west of Wetland Q.</p>	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30 ft</u>)					
1. <u>Alnus rubra</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75%</u> (A/B)	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
	<u>25</u>	= Total Cover			
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)					
1. <u>Rubus spectabilis</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
2. <u>Rubus armeniacus</u>	<u>1</u>	<u>No</u>	<u>FAC</u>		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
	<u>6</u>	= Total Cover			
Herb Stratum (Plot size: <u>10 ft</u>)					
1. <u>Agrostis capillaris</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>		
2. <u>Anthoxanthum odoratum</u>	<u>25</u>	<u>Yes</u>	<u>FACU</u>		
3. <u>Ranunculus repens</u>	<u>15</u>	<u>No</u>	<u>FAC</u>		
4. <u>Holcus lanatus</u>	<u>14</u>	<u>No</u>	<u>FAC</u>		
5. <u>Cirsium arvense</u>	<u>3</u>	<u>No</u>	<u>FAC</u>		
6. <u>Plantago lanceolata</u>	<u>2</u>	<u>No</u>	<u>FACU</u>		
7. <u>Juncus effusus</u>	<u>1</u>	<u>No</u>	<u>FACW</u>		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
	<u>100</u>	= Total Cover			
Woody Vine Stratum (Plot size: <u>30 ft</u>)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>0</u>					

Remarks: Hydrophytic vegetation criteria met through dominance test.

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/15/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-43
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Bench Local relief (concave, convex, none): None Slope (%): 1
 Subregion (LRR): A2 Lat: 48.186240 Long: -122.10242323 Datum: WGS 84
 Soil Map Unit Name: Tokul-Winston gravelly loams, 25 to 65 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p align="center">Not all three wetland criteria met, lacking hydric soils. Data collected west of along bank of Stream V.</p>	

VEGETATION – Use scientific names of plants.

	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	
Tree Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)				
1. <u>Rubus spectabilis</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Ribes bracteosum</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>	
3. <u>Sambucus racemosa</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>75</u>	= Total Cover		
Herb Stratum (Plot size: <u>10 ft</u>)				
1. <u>Tolmeia mensiezii</u>	<u>60</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Lysichiton americanus</u>	<u>5</u>	<u>No</u>	<u>OBL</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
	<u>65</u>	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>35</u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
 Total Number of Dominant Species Across All Strata: 4 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 75% (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by:
 OBL species _____ x 1 = _____
 FACW species _____ x 2 = _____
 FAC species _____ x 3 = _____
 FACU species _____ x 4 = _____
 UPL species _____ x 5 = _____
 Column Totals: _____ (A) _____ (B)
 Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
 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
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No

Remarks: Hydrophytic vegetation criteria met through dominance test.

SOIL

Sampling Point: DP-43

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0 - 9	10YR 2/2	100	-	-	-	-	Loam	
9 - 11	10YR 3/1	100	-	-	-	-	GrSa	Gravelly sand
11 - 15	10Y 3/1	97	7.5YR 2.5/2	3	C	M	LoSa	Loamy sand
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)						Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/> Histosol (A1)			<input type="checkbox"/> Sandy Redox (S5)			<input type="checkbox"/> 2 cm Muck (A10)		
<input type="checkbox"/> Histic Epipedon (A2)			<input type="checkbox"/> Stripped Matrix (S6)			<input type="checkbox"/> Red Parent Material (TF2)		
<input type="checkbox"/> Black Histic (A3)			<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)			<input type="checkbox"/> Very Shallow Dark Surface (TF12)		
<input type="checkbox"/> Hydrogen Sulfide (A4)			<input type="checkbox"/> Loamy Gleyed Matrix (F2)			<input type="checkbox"/> Other (Explain in Remarks)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)			<input type="checkbox"/> Depleted Matrix (F3)			³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.		
<input type="checkbox"/> Thick Dark Surface (A12)			<input type="checkbox"/> Redox Dark Surface (F6)					
<input type="checkbox"/> Sandy Mucky Mineral (S1)			<input type="checkbox"/> Depleted Dark Surface (F7)					
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			<input type="checkbox"/> Redox Depressions (F8)					
<input type="checkbox"/> Restrictive Layer (if present): Type: <u>N/A</u> Depth (inches): <u>--</u>								
Remarks: No hydric soil criteria met. Redox begins too deep (>6") to meet S5 requirements. Soils appear to drain quickly, and do not exhibit problematic criteria.								

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:			
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>10</u>		
Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>8</u>		
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: Hydrology criteria met directly through primary indicators A2 and A3.			

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/15/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-44
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Bench Local relief (concave, convex, none): None Slope (%): 1
 Subregion (LRR): A2 Lat: 48.186384 Long: -122.10267023 Datum: WGS 84
 Soil Map Unit Name: Tokul-Winston gravelly loams, 25 to 65 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center">All three wetland criteria met. Data collected within Wetland R.</p>	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)				
1. <u>Rubus spectabilis</u>	<u>60</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Sambucus racemosa</u>	<u>15</u>	<u>No</u>	<u>FACU</u>	
3. <u>Ribes bracteosum</u>	<u>2</u>	<u>No</u>	<u>FAC</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>77</u>	= Total Cover		
Herb Stratum (Plot size: <u>10 ft</u>)				
1. <u>Tolmeia mensiezii</u>	<u>50</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Athyrium cyclosorum</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
	<u>55</u>	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>45</u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
 Total Number of Dominant Species Across All Strata: 2 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by:
 OBL species _____ x 1 = _____
 FACW species _____ x 2 = _____
 FAC species _____ x 3 = _____
 FACU species _____ x 4 = _____
 UPL species _____ x 5 = _____
 Column Totals: _____ (A) _____ (B)
 Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
 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
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No

Remarks: Hydrophytic vegetation criteria met through dominance test.

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/15/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-45
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 10
 Subregion (LRR): A2 Lat: 48.186331 Long: -122.10280120 Datum: WGS 84
 Soil Map Unit Name: Tokul-Winston gravelly loams, 25 to 65 percent slopes NWI classification: N/A

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 <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p align="center">No wetland criteria met. Data collected south of Wetland R.</p>	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30 ft</u>)					
1. <u>Acer macrophyllum</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</u> (A/B)	
2. <u>Tsuga heterophylla</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>		
3. _____					
4. _____					
	<u>30</u>	= Total Cover			
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)					
1. <u>Rubus spectabilis</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
2. <u>Sambucus racemosa</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>		
3. _____					
4. _____					
5. _____					
	<u>40</u>	= Total Cover			
Herb Stratum (Plot size: <u>10 ft</u>)					
1. <u>Polystichum munitum</u>	<u>25</u>	<u>Yes</u>	<u>FACU</u>		
2. <u>Tolmeia mensiezii</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>		
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
	<u>40</u>	= Total Cover			
Woody Vine Stratum (Plot size: <u>30 ft</u>)					
1. _____					
2. _____					
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>60</u>					

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
 Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present? Yes No

Remarks:
 No hydrophytic vegetation criteria met. Dominance test failed, prevalence index not warranted due to lack of combined hydric soils and hydrology.

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/15/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-46
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 10
 Subregion (LRR): A2 Lat: 48.187324 Long: -122.10535435 Datum: WGS 84
 Soil Map Unit Name: Tokul-Winston gravelly loams, 25 to 65 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center">All three wetland criteria met. Data collected within Wetland S.</p>	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30 ft</u>)				
1. <u>Alnus rubra</u>	<u>35</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____	<u>35</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)				
1. <u>Rubus spectabilis</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	<u>30</u>	= Total Cover		
Herb Stratum (Plot size: <u>10 ft</u>)				
1. <u>Ranunculus repens</u>	<u>50</u>	<u>Yes</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Lysichiton americanus</u>	<u>5</u>	<u>No</u>	<u>OBL</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	<u>55</u>	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. _____	_____	_____	_____	
% Bare Ground in Herb Stratum <u>45</u>				_____

Remarks: Hydrophytic vegetation criteria met through dominance test.

SOIL

Sampling Point: DP-46

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0 - 8	10YR 3/1	100	-	-	-	-	SaLo	Sandy loam
8 - 16	2.5Y 3/1	85	10YR 3/3	10	C	M/PL	SiClLo	Silty clay loam
			5Y 4/1	5	D	M		

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/15/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-47
 Investigator(s): Rachael Hyland, Amanda Smith Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope (%): 2
 Subregion (LRR): A2 Lat: 48.187256 Long: -122.10544832 Datum: WGS 84
 Soil Map Unit Name: Tokul-Winston gravelly loams, 25 to 65 percent slopes NWI classification: N/A

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 <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p align="center">No wetland criteria met. Data collected south of Wetland S.</p>	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30 ft</u>)					
1. <u>Thuja plicata</u>	<u>90</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>40%</u> (A/B)	
2. <u>Alnus rubra</u>	<u>20</u>	<u>No</u>	<u>FAC</u>		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
	<u>110</u>	= Total Cover			
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)					
1. <u>Rubus armeniacus</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
2. <u>Ilex aquifolium</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>		
3. <u>Rubus spectabilis</u>	<u>10</u>	<u>No</u>	<u>FAC</u>		
4. <u>Prunus avium</u>	<u>10</u>	<u>No</u>	<u>FACU</u>		
5. _____	_____	_____	_____		
	<u>65</u>	= Total Cover			
Herb Stratum (Plot size: <u>10 ft</u>)					
1. <u>Rubus ursinus</u>	<u>40</u>	<u>Yes</u>	<u>FACU</u>		
2. <u>Polystichum munitum</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
	<u>50</u>	= Total Cover			
Woody Vine Stratum (Plot size: <u>30 ft</u>)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>50</u>					

Remarks: **No hydrophytic vegetation criteria met. Dominance test failed, prevalence index not warranted due to lack of combined hydric soils and hydrology.**

SOIL

Sampling Point: DP-47

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

Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0 - 2	10YR 3/2	100	-	-	-	-	SiLo	Silt loam
2 - 15	10YR 4/3	100	-	-	-	-	SiLo	Silt loam

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

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

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present):
 Type: N/A
 Depth (inches): --

Hydric Soil Present? Yes No

Remarks:
 No hydric soil criteria met.

HYDROLOGY

Wetland Hydrology Indicators:

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

Field Observations:

Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>	
Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>	

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

Remarks:
 No hydrology criteria met.

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/16/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-48
 Investigator(s): Casey Lanier, Garrett Jordan Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Berm Local relief (concave, convex, none): Convex Slope (%): 0
 Subregion (LRR): A2 Lat: 48.187703 Long: -122.11186923 Datum: WGS 84
 Soil Map Unit Name: Norma loam NWI classification: N/A

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 <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p align="center">No wetland criteria met. Data collected east of Wetland T.</p>	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: 30 ft)					
1. <u>Acer macrophyllum</u>	<u>35</u>	<u>Yes</u>	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</u> (A/B)	
2. <u>Alnus rubra</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>		
3. _____					
4. _____					
	<u>55</u>	= Total Cover		Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
Sapling/Shrub Stratum (Plot size: 30 ft)					
1. <u>Rubus spectabilis</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>		
2. <u>Corylus cornuta</u>	<u>30</u>	<u>Yes</u>	<u>FACU</u>		
3. <u>Sambucus racemosa</u>	<u>15</u>	<u>No</u>	<u>FACU</u>		
4. _____					
5. _____					
	<u>85</u>	= Total Cover			
Herb Stratum (Plot size: 10 ft)					
1. <u>Polystichum munitum</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
2. <u>Rubus ursinus</u>	<u>3</u>	<u>Yes</u>	<u>FACU</u>		
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
	<u>8</u>	= Total Cover			
Woody Vine Stratum (Plot size: 30 ft)					
1. _____					
2. _____					
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>92</u>					

Remarks: **No hydrophytic vegetation criteria met. Dominance test failed; prevalence index not warranted due to lack of combined hydric soil and hydrology.**

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/16/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-49
 Investigator(s): Casey Lanier, Garrett Jordan Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Convex Slope (%): 0
 Subregion (LRR): A2 Lat: 48.187756e Long: -122.11194305 Datum: WGS 84
 Soil Map Unit Name: Norma loam NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center">All three wetland criteria met. Data collected in Wetland T.</p>	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30 ft</u>)					
1. <u>Alnus rubra</u>	<u>55</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75%</u> (A/B)	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
<u>55</u> = Total Cover					
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)					
1. <u>Corylus cornuta</u>	<u>40</u>	<u>Yes</u>	<u>FACU</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
2. <u>Cornus alba</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>		
3. <u>Rubus spectabilis</u>	<u>5</u>	<u>No</u>	<u>FAC</u>		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
<u>65</u> = Total Cover					
Herb Stratum (Plot size: <u>10 ft</u>)					
1. <u>Tolmeia mensiezii</u>	<u>85</u>	<u>Yes</u>	<u>FAC</u>		
2. <u>Equisetum arvense</u>	<u>10</u>	<u>No</u>	<u>FAC</u>		
3. <u>Polystichum munitum</u>	<u>2</u>	<u>No</u>	<u>FACU</u>		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
<u>97</u> = Total Cover					
Woody Vine Stratum (Plot size: <u>30 ft</u>)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
<u>0</u> = Total Cover					
% Bare Ground in Herb Stratum <u>3</u>					

Remarks: Hydrophytic vegetation criteria met through dominance test.

SOIL

Sampling Point: DP-49

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

Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0 - 3	10YR 3/2	100	-	-	-	-	Loam	
3 - 14	2.5Y 3/2	90	7.5YR 3/3	10	C	M	SaLo	Sandy loam

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

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

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	
³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.		

Restrictive Layer (if present):
Type: N/A
Depth (inches): --

Hydric Soil Present? Yes No

Remarks:
Hydric soil criteria met through indicator F6.

HYDROLOGY

Wetland Hydrology Indicators:

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

Field Observations:

Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>6</u>	
Saturation Present? (includes capillary fringe)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>5</u>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			

Remarks:
Hydrology criteria met directly through primary indicators A2 and A3.

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/16/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-50
 Investigator(s): Casey Lanier, Garrett Jordan Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 3
 Subregion (LRR): A2 Lat: 48.185635 Long: -122.11180727 Datum: WGS 84
 Soil Map Unit Name: Pastik silt loam, 8 to 25 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Not all three wetland criteria met, only hydrophytic vegetation. Data collected in northwest portion of the site in area that has become overgrown with non-native invasive understory species.	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30 ft</u>)					
1. <u>Alnus rubra</u>	<u>30</u>	Yes	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67%</u> (A/B)	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
	<u>30</u>	= Total Cover			
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)					
1. <u>Rubus spectabilis</u>	<u>20</u>	Yes	FAC	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
2. <u>Sambucus racemosa</u>	<u>20</u>	Yes	FACU		
3. <u>Rubus armeniacus</u>	<u>15</u>	Yes	FAC		
4. <u>Corylus cornuta</u>	<u>5</u>	No	FACU		
5. _____	_____	_____	_____		
	<u>60</u>	= Total Cover			
Herb Stratum (Plot size: <u>10 ft</u>)					
1. <u>Ranunculus repens</u>	<u>35</u>	Yes	FAC		
2. <u>Polystichum munitum</u>	<u>15</u>	Yes	FACU		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
	<u>50</u>	= Total Cover			
Woody Vine Stratum (Plot size: <u>30 ft</u>)					
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
2. _____	_____	_____	_____		
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>50</u>				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Remarks: **Hydrophytic vegetation criteria met through dominance test.**

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/28/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-51
 Investigator(s): Rachael Hyland, Casey Lanier Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 0
 Subregion (LRR): A2 Lat: 48.175798 Long: -122.10366643 Datum: WGS 84
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Not all three wetland criteria met, lacking hydric soils. Data collected north/west of Wetland U. Observed hydrology is likely only present during winter wet months as this area appears to convey flows out of Wetland U.	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30 ft</u>)					
1. <u>Alnus rubra</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
_____	<u>40</u>	= Total Cover			
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)					
1. <u>Acer circinatum</u>	<u>35</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
2. <u>Rubus spectabilis</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
_____	<u>50</u>	= Total Cover			
Herb Stratum (Plot size: <u>10 ft</u>)					
1. <u>Tolmeia mensiezii</u>	<u>65</u>	<u>Yes</u>	<u>FAC</u>		
2. <u>Polystichum munitum</u>	<u>10</u>	<u>No</u>	<u>FACU</u>		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
_____	<u>75</u>	= Total Cover			
Woody Vine Stratum (Plot size: <u>30 ft</u>)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
_____	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>25</u>					

Remarks: **Hydrophytic vegetation criteria met through dominance test.**

SOIL

Sampling Point: DP-51

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 10	10YR 2/1	100	-	-	-	-	SiLo	Silt loam with organics
10 - 16	2.5Y 4/3	90	7.5YR 4/4	10	C	M	LoSa	Loamy sand

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

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

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present):
 Type: N/A
 Depth (inches): --

Hydric Soil Present? Yes No

Remarks:
 No hydric soil criteria met.

HYDROLOGY

Wetland Hydrology Indicators:

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

Field Observations:

Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>3</u>	
Saturation Present? (includes capillary fringe)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>1</u>	

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

Remarks:
 Hydrology criteria met directly through primary indicators A2 and A3. Area appears to function as overland outlet for Wetland U and likely experiences surface water or high groundwater table during the winter wet months.

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/28/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-52
 Investigator(s): Rachael Hyland, Casey Lanier Section, Township, Range: 13, 31N, 5E
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR): A2 Lat: 48.175721 Long: -122.10361665 Datum: WGS 84
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center">All three wetland criteria met. Data collected within Wetland U.</p>	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30 ft</u>)					
1. <u>Alnus rubra</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)	
2. <u>Populus balsamifera</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>		
3. _____					
4. _____					
	<u>15</u>	= Total Cover			
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)					
1. <u>Rubus spectabilis</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
2. <u>Acer circinatum</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>		
3. _____					
4. _____					
5. _____					
	<u>25</u>	= Total Cover			
Herb Stratum (Plot size: <u>10 ft</u>)					
1. _____					
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
	<u>0</u>	= Total Cover			
Woody Vine Stratum (Plot size: <u>30 ft</u>)					
1. _____					
2. _____					
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>100</u>					

Remarks: Hydrophytic vegetation criteria met through dominance test.

SOIL

Sampling Point: DP-52

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 5	10YR 3/1	100	-	-	-	-	GrLo	Gravelly loam
5 - 16	10YR 4/1	97	10YR 4/4	2	C	M	GrSaLo	Gravelly sandy loam
			2.5Y 5/2	1	D	M		
			</					

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/28/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-53
 Investigator(s): Rachael Hyland, Casey Lanier Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Shoulder Local relief (concave, convex, none): Convex Slope (%): 2
 Subregion (LRR): A2 Lat: 48.176600 Long: -122.10470077 Datum: WGS 84
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p align="center">Not all three wetland criteria met, only hydrophytic vegetation. Data collected west of Wetland V.</p>	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30 ft</u>)					
1. <u>Thuja plicata</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60%</u> (A/B)	
2. <u>Betula sp.*</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>		
3. <u>Alnus rubra</u>	<u>5</u>	<u>No</u>	<u>FAC</u>		
4. _____					
	<u>35</u>	= Total Cover			
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)					
1. <u>Rubus spectabilis</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
2. <u>Coylus cornuta</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>		
3. <u>Pseudotsuga mensiezii</u>	<u>2</u>	<u>No</u>	<u>FACU</u>		
4. _____					
5. _____					
	<u>27</u>	= Total Cover			
Herb Stratum (Plot size: <u>10 ft</u>)					
1. <u>Polystichum munitum</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>		
2. <u>Dryopteris expansa</u>	<u>1</u>	<u>No</u>	<u>FAC</u>		
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
	<u>11</u>	= Total Cover			
Woody Vine Stratum (Plot size: <u>30 ft</u>)					
1. _____					
2. _____					
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>89</u>					

Remarks:
 Hydrophytic vegetation criteria met through dominance test.
 *Could not be identified to species, presumed to be FAC for scoring purposes

SOIL

Sampling Point: DP-53

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 3	2.5YR 2.5/1	100	-	-	-	-	O-horizon	
3 - 8	7.5YR 2.5/2	100	-	-	-	-	SiLo	Silt loam
8 - 10	7.5YR 3/2	100	-	-	-	-	SiLo	Silt loam, ashy
10 - 15	7.5YR 3/4	100	-	-	-	-	GrSiLo	Gravelly silt loam
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)						Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/> Histosol (A1)			<input type="checkbox"/> Sandy Redox (S5)			<input type="checkbox"/> 2 cm Muck (A10)		
<input type="checkbox"/> Histic Epipedon (A2)			<input type="checkbox"/> Stripped Matrix (S6)			<input type="checkbox"/> Red Parent Material (TF2)		
<input type="checkbox"/> Black Histic (A3)			<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)			<input type="checkbox"/> Very Shallow Dark Surface (TF12)		
<input type="checkbox"/> Hydrogen Sulfide (A4)			<input type="checkbox"/> Loamy Gleyed Matrix (F2)			<input type="checkbox"/> Other (Explain in Remarks)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)			<input type="checkbox"/> Depleted Matrix (F3)			³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.		
<input type="checkbox"/> Thick Dark Surface (A12)			<input type="checkbox"/> Redox Dark Surface (F6)					
<input type="checkbox"/> Sandy Mucky Mineral (S1)			<input type="checkbox"/> Depleted Dark Surface (F7)					
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			<input type="checkbox"/> Redox Depressions (F8)					
Restrictive Layer (if present): Type: <u>N/A</u> Depth (inches): <u>--</u>						Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Remarks: No hydric soil criteria met.								

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>		
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>		
Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>		
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No hydrology criteria met.			

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/28/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-54
 Investigator(s): Rachael Hyland, Casey Lanier Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): 1
 Subregion (LRR): A2 Lat: 48.176846 Long: -122.10437882 Datum: WGS 84
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p align="center">Not all three wetland criteria met, only hydrophytic vegetation present. Data collected east of Wetland V.</p>	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30 ft</u>)					
1. <u>Thuja plicata</u>	<u>85</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75%</u> (A/B)	
2. <u>Acer macrophyllum</u>	<u>10</u>	<u>No</u>	<u>FACU</u>		
3. <u>Alnus rubra</u>	<u>2</u>	<u>No</u>	<u>FAC</u>		
4. _____					
	<u>97</u>	= Total Cover		Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)					
1. <u>Acer circinatum</u>	<u>4</u>	<u>Yes</u>	<u>FAC</u>		
2. <u>Rubus spectabilis</u>	<u>2</u>	<u>Yes</u>	<u>FAC</u>		
3. <u>Vaccinium ovatum</u>	<u>1</u>	<u>No</u>	<u>FACU</u>		
4. _____					
5. _____					
	<u>7</u>	= Total Cover			
Herb Stratum (Plot size: <u>10 ft</u>)					
1. <u>Polystichum munitum</u>	<u>78</u>	<u>Yes</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
	<u>78</u>	= Total Cover			
Woody Vine Stratum (Plot size: <u>30 ft</u>)					
1. _____					
2. _____					
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>22</u>					

Remarks: Hydrophytic vegetation criteria met through dominance test.

SOIL

Sampling Point: DP-54

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0 - 8	7.5YR 2/2	100	-	-	-	-	Loam	
8 - 16+	7.5YR 4/4	100	-	-	-	-	SiLo	Silt loam

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 12/21/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-55E
 Investigator(s): Casey Lanier, Shauna Willet Section, Township, Range: 13, 31N, 5E
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR): A2 Lat: 48.177492 Long: -122.1027888 Datum: WGS 84
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center">All three wetland criteria met. Data collected within Wetland W. Inadvertently assigned a duplicate DP number, therefore labeled "DP-55E" where "E" indicates east.</p>	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30 ft</u>)					
1. <u>Prunus emarginata</u>	<u>40</u>	<u>Yes</u>	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75%</u> (A/B)	
2. <u>Alnus rubra</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>		
3. _____					
4. _____					
	<u>60</u>	= Total Cover			
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)					
1. <u>Rubus spectabilis</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
2. <u>Acer circinatum</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>		
3. <u>Vaccinium ovatum</u>	<u>3</u>	<u>No</u>	<u>FACU</u>		
4. _____					
5. _____					
	<u>48</u>	= Total Cover			
Herb Stratum (Plot size: <u>10 ft</u>)					
1. _____					
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
	<u>0</u>	= Total Cover			
Woody Vine Stratum (Plot size: <u>30 ft</u>)					
1. _____					
2. _____					
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>100</u>					

Remarks: Hydrophytic vegetation criteria met through dominance test.

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/28/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-55W
 Investigator(s): Rachael Hyland, Casey Lanier Section, Township, Range: 13, 31N, 5E
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR): A2 Lat: 48.176626 Long: -122.10461550 Datum: WGS 84
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Hydrophytic vegetation and hydrology criteria met, hydric soils criteria presumed to be met based on comparison to adjacent upland soils as well as topography/hydrogeomorphic position in the landscape. Growing season investigation is recommended to confirm or disprove presence of hydric soils. Data collected within Wetland V. Inadvertently assigned a duplicate DP number, therefore labeled "DP-55W" where "W" indicates west.	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30 ft</u>)					
1. <u>Alnus rubra</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>83%</u> (A/B)	
2. <u>Populus balsamifera</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>		
3. _____					
4. _____					
	<u>30</u>	= Total Cover			
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)					
1. <u>Rubus spectabilis</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
2. <u>Acer circinatum</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>		
3. <u>Betula sp.*</u>	<u>5</u>	<u>No</u>	<u>FAC</u>		
4. _____					
5. _____					
	<u>30</u>	= Total Cover			
Herb Stratum (Plot size: <u>10 ft</u>)					
1. <u>Polystichum munitum</u>	<u>3</u>	<u>Yes</u>	<u>FACU</u>		
2. <u>Tolmeia mensiezii</u>	<u>2</u>	<u>Yes</u>	<u>FAC</u>		
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
	<u>5</u>	= Total Cover			
Woody Vine Stratum (Plot size: <u>30 ft</u>)					
1. _____					
2. _____					
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>95</u>					

Remarks: Hydrophytic vegetation criteria met through dominance test.
 *Could not be identified to species, assigned FAC status for scoring purposes

SOIL

Sampling Point: DP-55W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0 - 12	10YR 2/1	100	-	-	-	-	SaLo	Sandy loam
12 - 23	10YR 3/1	95	10YR 3/4	5	C	M	Loam	
	</							

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 12/21/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-56E
 Investigator(s): Casey Lanier, Shauna Willet Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 2
 Subregion (LRR): A2 Lat: 48.177576 Long: -122.10281440 Datum: WGS 84
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: N/A

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 <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <u>Not all three wetland criteria met, only hydrology observed. However, observed hydrology is likely temporarily elevated due to winter wet season conditions. Data collected north of Wetland W. Inadvertently assigned a duplicate DP number, therefore labeled "DP-56E" where "E" indicates east.</u>	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30 ft</u>)				
1. <u>Pseudotsuga menziesii</u>	<u>35</u>	<u>Yes</u>	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>40%</u> (A/B)
2. <u>Betula sp.*</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>	
3. _____				
4. _____				
	<u>60</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)				
1. <u>Rubus spectabilis</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
2. <u>Ilex aquifolium</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>	
3. <u>Acer circinatum</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
4. _____				
5. _____				
	<u>40</u>	= Total Cover		
Herb Stratum (Plot size: <u>10 ft</u>)				
1. <u>Polystichum munitum</u>	<u>25</u>	<u>Yes</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Maianthemum racemosum</u>	<u>1</u>	<u>No</u>	<u>FAC</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
	<u>26</u>	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft</u>)				
1. _____				Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
2. _____				
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>74</u>				

Remarks: No hydrophytic vegetation criteria met; Dominance test failed; prevalence index not warranted due to lack of combined hydric soil and hydrology. *appears to be a hybrid species, presumed FAC for scoring purposes.

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 11/29/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-56W
 Investigator(s): Rachael Hyland, Casey Lanier Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 2
 Subregion (LRR): A2 Lat: 48.186864 Long: -122.10887033 Datum: WGS 84
 Soil Map Unit Name: Pastik silt loam, 8 to 25 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Not all three wetland criteria met, lacking hydrology. Furthermore, observed hydric soils may not depict contemporary conditions. Data collected in north central portion of the site where historical ditching activities are prevalent and logging occurred circa 2012. Inadvertently assigned a duplicate DP number, therefore labeled "DP-56W" where "W" indicates west.	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30 ft</u>)					
1. <u>Alnus rubra</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>83%</u> (A/B)	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
	<u>10</u>	= Total Cover			
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)					
1. <u>Rubus armeniacus</u>	<u>3</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
2. <u>Pseudotsuga mensiezii</u>	<u>2</u>	<u>Yes</u>	<u>FACU</u>		
3. <u>Rubus spectabilis</u>	<u>1</u>	<u>No</u>	<u>FAC</u>		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
	<u>6</u>	= Total Cover			
Herb Stratum (Plot size: <u>10 ft</u>)					
1. <u>Holcus lanatus</u>	<u>55</u>	<u>Yes</u>	<u>FAC</u>		
2. <u>Equisetum arvense</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>		
3. <u>Ranunculus repens</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>		
4. <u>Phalaris arundinacea</u>	<u>5</u>	<u>No</u>	<u>FACW</u>		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
	<u>100</u>	= Total Cover			
Woody Vine Stratum (Plot size: <u>30 ft</u>)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>0</u>					

Remarks: Hydrophytic vegetation criteria met through dominance test.

SOIL

Sampling Point: DP-56W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 8	10YR 2/2	100	-	-	-	-	SaLo	Sandy loam
8 - 11	10YR 2/2	95	7.5YR 3/3	5	C	M	SaLo	Sandy loam
11 - 17	5Y 5/2	70	10YR 4/6	15	C	M	SiClLo	Silty clay loam
			10Y 5/1	15	D	M		
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)						Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/> Histosol (A1)			<input type="checkbox"/> Sandy Redox (S5)			<input type="checkbox"/> 2 cm Muck (A10)		
<input type="checkbox"/> Histic Epipedon (A2)			<input type="checkbox"/> Stripped Matrix (S6)			<input type="checkbox"/> Red Parent Material (TF2)		
<input type="checkbox"/> Black Histic (A3)			<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)			<input type="checkbox"/> Very Shallow Dark Surface (TF12)		
<input type="checkbox"/> Hydrogen Sulfide (A4)			<input type="checkbox"/> Loamy Gleyed Matrix (F2)			<input type="checkbox"/> Other (Explain in Remarks)		
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)			<input type="checkbox"/> Depleted Matrix (F3)			³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.		
<input type="checkbox"/> Thick Dark Surface (A12)			<input type="checkbox"/> Redox Dark Surface (F6)					
<input type="checkbox"/> Sandy Mucky Mineral (S1)			<input type="checkbox"/> Depleted Dark Surface (F7)					
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			<input type="checkbox"/> Redox Depressions (F8)					
Restrictive Layer (if present): Type: <u>Silty clay loam</u> Depth (inches): <u>11</u>						Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Remarks: Hydric soil criteria met through indicator A11. Soils are likely relict due to the historical ditching and lack of hydrology.								

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>		
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>		
Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>		
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No hydrology criteria met. Some evidence of water seeping through root lining, but no water table or saturation within 16" BGS. Area appears to have experienced extensive historical ditching.			

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 12/21/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-57
 Investigator(s): Casey Lanier, Shauna Willet Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 5
 Subregion (LRR): A2 Lat: 48.181590 Long: -122.10749500 Datum: WGS 84
 Soil Map Unit Name: Tokul-Winston gravelly loams, 25 to 65 percent slopes NWI classification: N/A

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 <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p align="center">No wetland criteria met. Data collected in swale east of Wetland D/H, and upgradient of Stream W.</p>	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30 ft</u>)				
1. <u>Thuja plicata</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
2. <u>Tsuga heterophylla</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____	<u>60</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)				
1. <u>Acer circinatum</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
2. <u>Rubus spectabilis</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>	
3. <u>Sambucus racemosa</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____	<u>50</u>	= Total Cover		
Herb Stratum (Plot size: <u>10 ft</u>)				
1. <u>Polystichum munitum</u>	<u>75</u>	<u>Yes</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Tolmeia mensiezii</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____	<u>80</u>	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
2. _____	_____	_____	_____	
_____	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>20</u>				

Remarks: **No hydrophytic vegetation criteria met. Dominance test failed; prevalence index not warranted due to lack of combined hydric soil and hydrology.**

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 12/21/23
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-58
 Investigator(s): Casey Lanier, Shauna Willet Section, Township, Range: 12, 31N, 5E
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope (%): 1
 Subregion (LRR): A2 Lat: 48.181038 Long: -122.11289666 Datum: WGS 84
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: No wetland criteria met. Data collected in topographic low point in the southwest corner of the site. Area appears to have been historically manipulated due to the presence of access roads and a powerline right of way.	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
				<u>0</u> = Total Cover
<u>Sapling/Shrub Stratum</u> (Plot size: <u>30 ft</u>)				
1. <u>Rubus armeniacus</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
				<u>5</u> = Total Cover
<u>Herb Stratum</u> (Plot size: <u>10 ft</u>)				
1. <u>Phalaris arundinacea</u>	<u>94</u>	<u>Yes</u>	<u>FACW</u>	
2. <u>Ranunculus repens</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
3. <u>Urtica dioica</u>	<u>1</u>	<u>No</u>	<u>FAC</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
				<u>100</u> = Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
				<u>0</u> = Total Cover
<u>% Bare Ground in Herb Stratum</u> <u>0</u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
 Total Number of Dominant Species Across All Strata: 2 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by:
 OBL species _____ x 1 = _____
 FACW species _____ x 2 = _____
 FAC species _____ x 3 = _____
 FACU species _____ x 4 = _____
 UPL species _____ x 5 = _____
 Column Totals: _____ (A) _____ (B)
 Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
 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
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No

Remarks: **Hydrophytic vegetation criteria met through dominance test.**

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 9/18/2024
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-59
 Investigator(s): Casey Lanier, Alex Murphy Section, Township, Range: 13, 31N, 5E
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 2-3
 Subregion (LRR): A2 Lat: 48.175554 Long: -122.10690379 Datum: WGS 84
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Not all three wetland criteria met; only one secondary hydrology indicator observed. Data collected in topographic low point in southernmost portion of site, between Wetland Z and Wetland 6.	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30 ft</u>)					
1. <u>Populus balsamifera</u>	<u>75</u>	Yes	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80%</u> (A/B)	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
	<u>75</u>	= Total Cover			
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)					
1. <u>Malus fusca</u>	<u>10</u>	Yes	FACW	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
2. <u>Acer circinatum</u>	<u>10</u>	Yes	FAC		
3. <u>Rubus spectabilis</u>	<u>10</u>	Yes	FAC		
4. <u>Vaccinium ovatum</u>	<u>5</u>	No	FACU		
5. _____	_____	_____	_____		
	<u>35</u>	= Total Cover			
Herb Stratum (Plot size: <u>10 ft</u>)					
1. <u>Polystichum munitum</u>	<u>15</u>	Yes	FACU		
2. <u>Tolmiea menziesii</u>	<u>2</u>	No	FAC		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
	<u>17</u>	= Total Cover			
Woody Vine Stratum (Plot size: <u>30 ft</u>)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>83</u>					

Remarks: **Hydrophytic vegetation criteria met through dominance test. Does not pass FAC Neutral Test.**

SOIL

Sampling Point: DP-59

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 10	10YR 2/1	100	-	-	-	-	SiLo	Silt loam with gravel
10 - 16	10YR 5/2	98	10YR 3/3	2	C	M	SiLo	Silt loam

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

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

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

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

Restrictive Layer (if present):
Type: N/A
Depth (inches): --

Hydric Soil Present? Yes No

Remarks:
Hydric soil criteria met through indicators A11 and F3.

HYDROLOGY

Wetland Hydrology Indicators:

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

Field Observations:

Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>	
Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>	

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

Remarks:
No hydrology criteria met. Only one secondary hydrology indicator observed; two are required to meet. Saturation and water table were absent to a depth of 16". No direct observations of hydrology were noted during the fall and winter 2023 investigations.

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 9/18/2024
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-60
 Investigator(s): Casey Lanier, Alex Murphy Section, Township, Range: 13, 31N, 5E
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 0
 Subregion (LRR): A2 Lat: 48.175681 Long: -122.10709691 Datum: WGS 84
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p align="center">All three wetland criteria met. Data collected in Wetland Z on southernmost portion of site.</p>	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30 ft</u>)					
1. <u>Acer circinatum</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80%</u> (A/B)	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
_____	<u>15</u>	= Total Cover			
Sapling/Shrub Stratum (Plot size: <u>30 ft</u>)					
1. <u>Rubus spectabilis</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
2. <u>Sambucus racemosa</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>		
3. <u>Lonicera involucrata</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
_____	<u>20</u>	= Total Cover			
Herb Stratum (Plot size: <u>10 ft</u>)					
1. <u>Tolmiea menziesii</u>	<u>80</u>	<u>Yes</u>	<u>FAC</u>		
2. <u>Athyrium cyclosorum</u>	<u>5</u>	<u>No</u>	<u>FACU</u>		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
_____	<u>85</u>	= Total Cover			
Woody Vine Stratum (Plot size: <u>30 ft</u>)					
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
2. _____	_____	_____	_____		
_____	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>15</u>					

Remarks: Hydrophytic vegetation criteria met through dominance test. Does not pass FAC Neutral Test.

SOIL

Sampling Point: DP-60

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

Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0 - 12	10YR 2/1	100	-	-	-	-	SiLo	Silt loam
12 - 17	10YR 5/2	90	2.5YR 4/3	10	C	M	SiLo	Silt loam

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

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

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

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

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

Restrictive Layer (if present):
 Type: N/A
 Depth (inches): --

Hydric Soil Present? Yes No

Remarks:
 Hydric soil criteria met through indicator A11.

HYDROLOGY

Wetland Hydrology Indicators:

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

Field Observations:

Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>	
Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>None</u>	

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

Remarks:
 Wetland hydrology criteria met indirectly through secondary indicators B9 and D2, although no direct observations of hydrology were noted during the fall and winter 2023 investigations. Saturation and water table absent to a depth of 18".

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

Project/Site: 2376.0008 - Arlington East Hill City/County: Arlington / Snohomish Sampling Date: 9/18/2024
 Applicant/Owner: Arlington 360, LLC State: WA Sampling Point: DP-61
 Investigator(s): Casey Lanier, Alex Murphy Section, Township, Range: 13, 31N, 5E
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 0
 Subregion (LRR): A2 Lat: 48.175581 Long: -122.10758239 Datum: WGS 84
 Soil Map Unit Name: Tokul gravelly medial loam, 0 to 8 percent slopes NWI classification: N/A

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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Not all three wetland criteria met; only hydrophytic vegetation indicators observed. Data collected in topographic low point on southwesternmost portion of site, southwest of Wetland Z.	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: 30 ft)					
1. <u>Populus balsamifera</u>	<u>48</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)	
2. <u>Alnus rubra</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>		
3. _____					
4. _____					
	<u>68</u>	= Total Cover		Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
Sapling/Shrub Stratum (Plot size: 30 ft)					
1. <u>Symphoricarpos albus</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>		
2. <u>Rubus spectabilis</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>		
3. <u>Sambucus racemosa</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>		
4. _____					
5. _____					
	<u>35</u>	= Total Cover			
Herb Stratum (Plot size: 10 ft)					
1. <u>Polystichum munitum</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
	<u>5</u>	= Total Cover			
Woody Vine Stratum (Plot size: 30 ft)					
1. _____					
2. _____					
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>95</u>					

Remarks: **No hydrophytic vegetation criteria met. Prevalence index not warranted due to lack of combined hydric soil and wetland hydrology indicators. Does not pass FAC Neutral Test.**

Attachment E – Wetland Rating Forms

Wetland name or number A

RATING SUMMARY – Western Washington

Name of wetland (or ID #): A Date of site visit: 10/25/23
 Rated by Rachael Hyland, Casey Lanier Trained by Ecology? Yes No Date of training 3/2019
 HGM Class used for rating Depressional Wetland has multiple HGM classes? Y N

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

OVERALL WETLAND CATEGORY III (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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	L	L	L	
Landscape Potential	M	M	H	
Value	H	M	M	TOTAL
Score Based on Ratings	6	5	6	17

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number A

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number A

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number A

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?		
D 1.1. <u>Characteristics of surface water outflows from the wetland:</u> Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. 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.	points = 3 points = 2 points = 1 points = 1	3
D 1.2. <u>The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions).</u> Yes = 4 No = 0		0
D 1.3. <u>Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes):</u> Wetland has persistent, ungrazed, plants > 95% of area Wetland has persistent, ungrazed, plants > ½ of area Wetland has persistent, ungrazed plants > 1/10 of area Wetland has persistent, ungrazed plants < 1/10 of area	points = 5 points = 3 points = 1 points = 0	1
D 1.4. <u>Characteristics of seasonal ponding or inundation:</u> <i>This is the area that is ponded for at least 2 months. See description in manual.</i> Area seasonally ponded is > ½ total area of wetland Area seasonally ponded is > ¼ total area of wetland Area seasonally ponded is < ¼ total area of wetland	points = 4 points = 2 points = 0	0
Total for D 1 Add the points in the boxes above		4

Rating of Site Potential If score is: 12-16 = H 6-11 = M X 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?		
D 2.1. Does the wetland unit receive stormwater discharges?	Yes = 1 No = 0	0
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants?	Yes = 1 No = 0	1
D 2.3. Are there septic systems within 250 ft of the wetland?	Yes = 1 No = 0	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 _____	Yes = 1 No = 0	0
Total for D 2 Add the points in the boxes above		1

Rating of Landscape Potential If score is: 3 or 4 = H X 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 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 = 0	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
D 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 basin in which the unit is found)?	Yes = 2 No = 0	2
Total for D 3 Add the points in the boxes above		2

Rating of Value If score is: X 2-4 = H 1 = M 0 = L Record the rating on the first page

NOTES and FIELD OBSERVATIONS:

Wetland name or number A

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. Characteristics of surface water outflows from the wetland:		
Wetland is a depression or flat depression with no surface water leaving it (no outlet)	points = 4	4
Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet	points = 2	
Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch	points = 1	
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	
D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part.		
Marks of ponding are 3 ft or more above the surface or bottom of outlet	points = 7	0
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 "headwater" wetland	points = 3	
Wetland is flat but has small depressions on the surface that trap water	points = 1	
Marks of ponding less than 0.5 ft (6 in)	points = 0	
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 less than 10 times the area of the unit	points = 5	0
The area of the basin is 10 to 100 times the area of the unit	points = 3	
The area of the basin is more than 100 times the area of the unit	points = 0	
Entire wetland is in the Flats class	points = 5	
Total for D 4	Add the points in the boxes above	4

Rating of Site Potential If score is: 12-16 = H 6-11 = M X 0-5 = L Record the rating on the 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?	Yes = 1 No = 0	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	1
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)?	Yes = 1 No = 0	0
Total for D 5	Add the points in the boxes above	1

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

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 around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met.		
The wetland 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):		1
• Flooding occurs in a sub-basin that is immediately down-gradient of unit.	points = 2	
• Surface flooding problems are in a sub-basin farther down-gradient.	points = 1	
Flooding from groundwater is an issue in the sub-basin.	points = 1	
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 _____	points = 0	
There are no problems with flooding downstream of the wetland.	points = 0	
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 = 0	0
Total for D 6	Add the points in the boxes above	1

Rating of Value If score is: 2-4 = H X 1 = M 0 = L Record the rating on the first page

Wetland name or number A

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: *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 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
 - Emergent 3 structures: points = 2
 - Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1
 - Forested (areas where trees have > 30% cover) 1 structure: points = 0
- If the unit has a Forested class, check if:*
- 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

1

H 1.2. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- Permanently flooded or inundated 4 or more types present: points = 3
- Seasonally flooded or inundated 3 types present: points = 2
- Occasionally flooded or inundated 2 types present: points = 1
- Saturated only 1 type present: points = 0
- Permanently flowing stream or river in, or adjacent to, the wetland
- Seasonally flowing stream in, or adjacent to, the wetland
- Lake Fringe wetland** **2 points**
- Freshwater tidal wetland** **2 points**

1

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft².

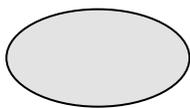
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

- If you counted: > 19 species points = 2
- 5 - 19 species points = 1
- < 5 species points = 0

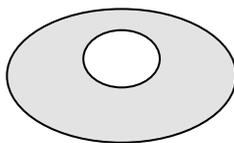
1

H 1.4. Interspersion of habitats

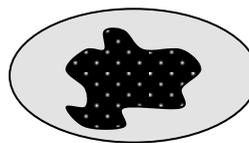
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



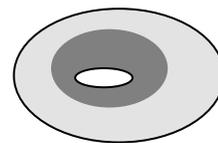
None = 0 points



Low = 1 point

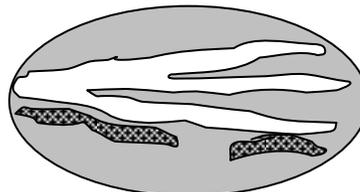
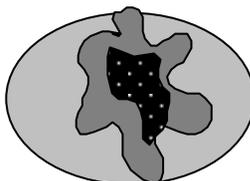
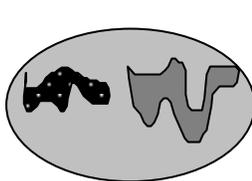


Moderate = 2 points



1

All three diagrams in this row are **HIGH** = 3points



Wetland name or number A

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input checked="" type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input type="checkbox"/> 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)</p> <p><input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>	1
<p>Total for H 1</p>	5

Rating of Site Potential If score is: 15-18 = H 7-14 = M X 0-6 = L *Record the rating on the first page*

<p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>	
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <input type="text" value="20.67"/> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>	2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.2"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <input type="text" value="51.72499999999999"/> %</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>	0
<p>Total for H 2</p>	5

Rating of Landscape Potential If score is: X 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

<p>H 3.0. Is the habitat provided by the site valuable to society?</p>	
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p>— It has 3 or more priority habitats within 100 m (see next page)</p> <p>— It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p>— It is mapped as a location for an individual WDFW priority species</p> <p>— It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p>— 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</p> <p><input checked="" type="checkbox"/> Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>	1

Rating of Value If score is: 2 = H X 1 = M 0 = L *Record the rating on the first page*

Wetland name or number A

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

Wetland name or number A

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt <input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25) <input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland. <input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? <input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf <input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4 NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

Wetland name or number A

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has 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 ¾ 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 1/10 ac (4350 ft²) <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Wetland name or number B

RATING SUMMARY – Western Washington

Name of wetland (or ID #): B Date of site visit: 10/31/23
 Rated by Rachael Hyland, Casey Lanier, Amanda Smith Trained by Ecology? Yes No Date of training 3/2019
 HGM Class used for rating Slope Wetland has multiple HGM classes? Y N

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

OVERALL WETLAND CATEGORY III (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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	L	L	M	
Landscape Potential	L	L	H	
Value	H	M	H	TOTAL
Score Based on Ratings	5	4	8	17

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number B

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number B

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number B

SLOPE WETLANDS

Water Quality Functions - Indicators that the site functions 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: <i>(a 1% slope has a 1 ft vertical drop in elevation for every 100 ft of horizontal distance)</i> Slope is 1% or less points = 3 Slope is > 1%-2% points = 2 Slope is > 2%-5% points = 1 Slope is greater than 5% points = 0	0	
S 1.2. <u>The soil 2 in below the surface (or duff layer)</u> is true clay or true organic (use NRCS definitions): Yes = 3 No = 0		3
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollutants: Choose the points appropriate for the description that best fits the plants in the wetland. <i>Dense means you have trouble seeing the soil surface (>75% cover), and uncut means not grazed or mowed and plants are higher than 6 in.</i> Dense, uncut, herbaceous plants > 90% of the wetland area points = 6 Dense, uncut, herbaceous plants > ½ of area points = 3 Dense, woody, plants > ½ of area points = 2 Dense, uncut, herbaceous plants > ¼ of area points = 1 Does not meet any of the criteria above for plants points = 0	2	
Total for S 1 Add the points in the boxes above		5

Rating of Site Potential If score is: 12 = H 6-11 = M X 0-5 = L

Record the rating on the first page

S 2.0. Does the landscape have the potential to support the water quality function of the site?		
S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in land uses that generate pollutants? Yes = 1 No = 0	0	
S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other sources _____ Yes = 1 No = 0	0	
Total for S 2 Add the points in the boxes above		0

Rating of Landscape Potential If score is: 1-2 = M X 0 = L

Record the rating on the first page

S 3.0. Is the water quality improvement provided by the site valuable to society?		
S 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 = 0	0	
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? <i>At least one aquatic resource in the basin is on the 303(d) list.</i> Yes = 1 No = 0	0	
S 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? <i>Answer YES if there is a TMDL for the basin in which unit is found.</i> Yes = 2 No = 0	2	
Total for S 3 Add the points in the boxes above		2

Rating of Value If score is: X 2-4 = H 1 = M 0 = L

Record the rating on the first page

Wetland name or number B

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: *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 ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.*

- | | | |
|--|----------------------------------|---|
| <input type="checkbox"/> Aquatic bed | 4 structures or more: points = 4 | 2 |
| <input type="checkbox"/> Emergent | 3 structures: points = 2 | |
| <input checked="" type="checkbox"/> Scrub-shrub (areas where shrubs have > 30% cover) | 2 structures: points = 1 | |
| <input checked="" type="checkbox"/> Forested (areas where trees have > 30% cover) | 1 structure: points = 0 | |
| <i>If the unit has a Forested class, check if:</i> | | |
| <input checked="" type="checkbox"/> 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. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- | | | |
|---|-------------------------------------|---|
| <input type="checkbox"/> Permanently flooded or inundated | 4 or more types present: points = 3 | 2 |
| <input type="checkbox"/> Seasonally flooded or inundated | 3 types present: points = 2 | |
| <input checked="" type="checkbox"/> Occasionally flooded or inundated | 2 types present: points = 1 | |
| <input checked="" type="checkbox"/> Saturated only | 1 type present: points = 0 | |
| <input checked="" type="checkbox"/> Permanently flowing stream or river in, or adjacent to, the wetland | | |
| <input type="checkbox"/> Seasonally flowing stream in, or adjacent to, the wetland | | |
| <input type="checkbox"/> Lake Fringe wetland | 2 points | |
| <input type="checkbox"/> Freshwater tidal wetland | 2 points | |

H 1.3. Richness of plant species

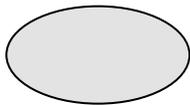
Count the number of plant species in the wetland that cover at least 10 ft².

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 milfoil, reed canarygrass, purple loosestrife, Canadian thistle

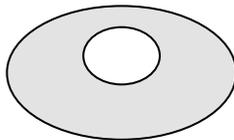
- | | | |
|------------------------------|------------|---|
| If you counted: > 19 species | points = 2 | 1 |
| 5 - 19 species | points = 1 | |
| < 5 species | points = 0 | |

H 1.4. Interspersion of habitats

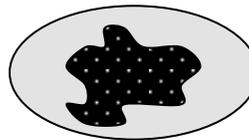
Decide from the diagrams below whether interspersions among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



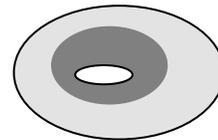
None = 0 points



Low = 1 point

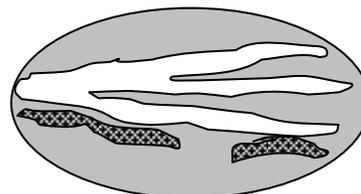
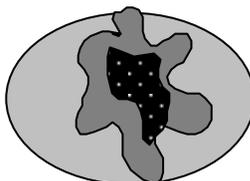
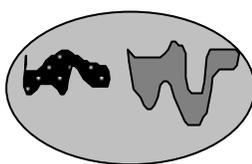


Moderate = 2 points



1

All three diagrams in this row are **HIGH** = 3points



Wetland name or number B

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input checked="" type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input checked="" type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input checked="" type="checkbox"/> 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)</p> <p><input checked="" type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>	4
<p>Total for H 1</p>	<p>Add the points in the boxes above</p> <p>10</p>

Rating of Site Potential If score is: 15-18 = H 7-14 = M 0-6 = L *Record the rating on the first page*

<p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>	
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <input type="text" value="20.67"/> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>	2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.2"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <input type="text" value="51.72499999999999"/> %</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>	0
<p>Total for H 2</p>	<p>Add the points in the boxes above</p> <p>5</p>

Rating of Landscape Potential If score is: 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

<p>H 3.0. Is the habitat provided by the site valuable to society?</p>	
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p><input checked="" type="checkbox"/> It has 3 or more priority habitats within 100 m (see next page)</p> <p><input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p><input type="checkbox"/> It is mapped as a location for an individual WDFW priority species</p> <p><input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p><input type="checkbox"/> 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</p> <p>Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>	2

Rating of Value If score is: 2 = H 1 = M 0 = L *Record the rating on the first page*

Wetland name or number B

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

Wetland name or number B

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt</p> <p style="text-align: right;"><input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25)</p> <p><input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland.</p> <p><input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4</p> <p>NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

Wetland name or number B

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has 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 ¾ 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 1/10 ac (4350 ft²) <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Wetland name or number C

RATING SUMMARY – Western Washington

Name of wetland (or ID #): C Date of site visit: 10/26/23
 Rated by Rachael Hyland, Amanda Smith Trained by Ecology? Yes No Date of training 3/2019
 HGM Class used for rating Riverine Wetland has multiple HGM classes? Y N

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

OVERALL WETLAND CATEGORY II (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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	M	M	L	
Landscape Potential	H	M	H	
Value	H	M	H	TOTAL
Score Based on Ratings	8	6	7	21

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number C

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number C

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

C

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number C

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 $> \frac{3}{4}$ area of wetland	points = 8	4
Depressions cover $> \frac{1}{2}$ area of wetland	points = 4	
Depressions present but cover $< \frac{1}{2}$ area of wetland	points = 2	
No depressions present	points = 0	
R 1.2. Structure of plants in the wetland (areas with $>90\%$ cover at person height, not Cowardin classes)		
Trees or shrubs $> \frac{2}{3}$ area of the wetland	points = 8	6
Trees or shrubs $> \frac{1}{3}$ area of the wetland	points = 6	
Herbaceous plants (> 6 in high) $> \frac{2}{3}$ area of the wetland	points = 6	
Herbaceous plants (> 6 in high) $> \frac{1}{3}$ area of the wetland	points = 3	
Trees, shrubs, and ungrazed herbaceous $< \frac{1}{3}$ area of the wetland	points = 0	
Total for R 1	Add the points in the boxes above	10

Rating of Site Potential If score is: 12-16 = H ~~X~~ 6-11 = M 0-5 = 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?		
R 2.1. Is the wetland within an incorporated city or within its UGA?	Yes = 2 No = 0	2
R 2.2. Does the contributing basin to the wetland include a UGA or incorporated area?	Yes = 1 No = 0	1
R 2.3. Does at least 10% of the contributing basin contain tilled fields, pastures, or forests that have been clearcut within the last 5 years?	Yes = 1 No = 0	0
R 2.4. Is $> 10\%$ of the area within 150 ft of the wetland in land uses that generate pollutants?	Yes = 1 No = 0	0
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 _____	Yes = 1 No = 0	0
Total for R 2	Add the points in the boxes above	3

Rating of Landscape Potential If score is: ~~X~~ 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 wetland along a stream or river that is on the 303(d) list or on a tributary that drains to one within 1 mi?	Yes = 1 No = 0	0
R 3.2. Is the wetland along a stream or river that has TMDL limits for nutrients, toxics, or pathogens?	Yes = 1 No = 0	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 TMDL for the drainage in which the unit is found)	Yes = 2 No = 0	2
Total for R 3	Add the points in the boxes above	2

Rating of Value If score is: ~~X~~ 2-4 = H 1 = M 0 = L

Record the rating on the first page

Wetland name or number C

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: <i>Estimate the average 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).</i> If the ratio is more than 20 If the ratio is 10-20 If the ratio is 5-<10 If the ratio is 1-<5 If the ratio is < 1	points = 9 points = 6 points = 4 points = 2 points = 1	2
R 4.2. Characteristics of plants that slow down water velocities during floods: <i>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 classes).</i> Forest or shrub for > ¹ / ₃ area OR emergent plants > ² / ₃ area Forest or shrub for > ¹ / ₁₀ area OR emergent plants > ¹ / ₃ area Plants do not meet above criteria	points = 7 points = 4 points = 0	7
Total for R 4	Add the points in the boxes above	9

Rating of Site Potential If score is: 12-16 = H X 6-11 = M 0-5 = 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?		
R 5.1. Is the stream or river adjacent to the wetland downcut?	Yes = 0 No = 1	0
R 5.2. Does the up-gradient watershed include a UGA or incorporated area?	Yes = 1 No = 0	1
R 5.3. Is the up-gradient stream or river controlled by dams?	Yes = 0 No = 1	1
Total for R 5	Add the points in the boxes above	2

Rating of Landscape Potential If score is: 3 = H X 1 or 2 = M 0 = 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? <i>Choose the description that best fits the site.</i> 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	points = 2 points = 1 points = 0	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	0
Total for R 6	Add the points in the boxes above	1

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

Wetland name or number C

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: *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 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
 - Emergent 3 structures: points = 2
 - Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1
 - Forested (areas where trees have > 30% cover) 1 structure: points = 0
- If the unit has a Forested class, check if:*
- 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

0

H 1.2. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- Permanently flooded or inundated 4 or more types present: points = 3
- Seasonally flooded or inundated 3 types present: points = 2
- Occasionally flooded or inundated 2 types present: points = 1
- Saturated only 1 type present: points = 0
- Permanently flowing stream or river in, or adjacent to, the wetland
- Seasonally flowing stream in, or adjacent to, the wetland
- Lake Fringe wetland** **2 points**
- Freshwater tidal wetland** **2 points**

2

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft².

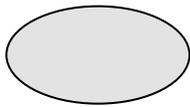
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

- If you counted: > 19 species points = 2
- 5 - 19 species points = 1
- < 5 species points = 0

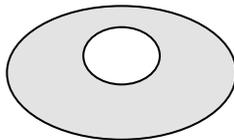
1

H 1.4. Interspersion of habitats

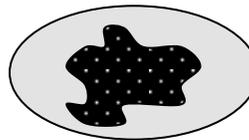
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



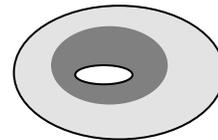
None = 0 points



Low = 1 point

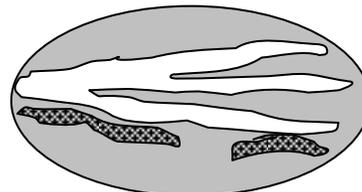
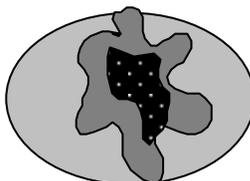
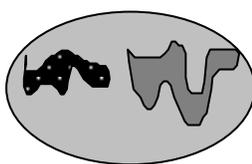


Moderate = 2 points



0

All three diagrams in this row are **HIGH** = 3points



Wetland name or number C

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input checked="" type="checkbox"/> 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)</p> <p><input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input checked="" type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>	2
<p>Total for H 1</p>	5

Rating of Site Potential If score is: 15-18 = H 7-14 = M X 0-6 = L *Record the rating on the first page*

<p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>	
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <u>20.67</u> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>	2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.2"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <u>51.7249999999999%</u></p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>	0
<p>Total for H 2</p>	5

Rating of Landscape Potential If score is: X 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

<p>H 3.0. Is the habitat provided by the site valuable to society?</p>	
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p><input checked="" type="checkbox"/> It has 3 or more priority habitats within 100 m (see next page)</p> <p><input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p><input type="checkbox"/> It is mapped as a location for an individual WDFW priority species</p> <p><input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p><input type="checkbox"/> 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</p> <p>Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>	2

Rating of Value If score is: X 2 = H 1 = M 0 = L *Record the rating on the first page*

Wetland name or number C

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

Wetland name or number C

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt <input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25) <input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. <input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? <input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf <input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4 NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

Wetland name or number C

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has 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 ¾ 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 1/10 ac (4350 ft²) <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Wetland name or number D/H

RATING SUMMARY – Western Washington

Name of wetland (or ID #): D/H Date of site visit: 10/31/23

Rated by Rachael Hyland, Casey Lanier, Amanda Smith Trained by Ecology? Yes No Date of training 3/2019

HGM Class used for rating Slope Wetland has multiple HGM classes? Y N

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

Source of base aerial photo/map ESRI ArcGIS

OVERALL WETLAND CATEGORY III (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

X Category III – Total score = 16 - 19

 Category IV – Total score = 9 - 15

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	L	L	M	
Landscape Potential	L	L	H	
Value	H	M	H	TOTAL
Score Based on Ratings	5	4	8	17

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number D/t

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number D/t

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number D/t

SLOPE WETLANDS

Water Quality Functions - Indicators that the site functions 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: <i>(a 1% slope has a 1 ft vertical drop in elevation for every 100 ft of horizontal distance)</i>			0
Slope is 1% or less	points = 3		
Slope is > 1%-2%	points = 2		
Slope is > 2%-5%	points = 1		
Slope is greater than 5%	points = 0		
S 1.2. <u>The soil 2 in below the surface (or duff layer)</u> is true clay or true organic <i>(use NRCS definitions)</i> : Yes = 3 No = 0			3
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollutants: Choose the points appropriate for the description that best fits the plants in the wetland. <i>Dense means you have trouble seeing the soil surface (>75% cover), and uncut means not grazed or mowed and plants are higher than 6 in.</i>			2
Dense, uncut, herbaceous plants > 90% of the wetland area	points = 6		
Dense, uncut, herbaceous plants > ½ of area	points = 3		
Dense, woody, plants > ½ of area	points = 2		
Dense, uncut, herbaceous plants > ¼ of area	points = 1		
Does not meet any of the criteria above for plants	points = 0		
Total for S 1		Add the points in the boxes above	5

Rating of Site Potential If score is: 12 = H 6-11 = M X 0-5 = L

Record the rating on the first page

S 2.0. Does the landscape have the potential to support the water quality function of the site?			
S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in land uses that generate pollutants?			0
	Yes = 1 No = 0		
S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other sources _____			0
	Yes = 1 No = 0		
Total for S 2		Add the points in the boxes above	0

Rating of Landscape Potential If score is: 1-2 = M X 0 = L

Record the rating on the first page

S 3.0. Is the water quality improvement provided by the site valuable to society?			
S 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?			0
	Yes = 1 No = 0		
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? <i>At least one aquatic resource in the basin is on the 303(d) list.</i>			0
	Yes = 1 No = 0		
S 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? <i>Answer YES if there is a TMDL for the basin in which unit is found.</i>			2
	Yes = 2 No = 0		
Total for S 3		Add the points in the boxes above	2

Rating of Value If score is: X 2-4 = H 1 = M 0 = L

Record the rating on the first page

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: *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 ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.*

- | | | |
|--|----------------------------------|---|
| <input type="checkbox"/> Aquatic bed | 4 structures or more: points = 4 | 2 |
| <input type="checkbox"/> Emergent | 3 structures: points = 2 | |
| <input checked="" type="checkbox"/> Scrub-shrub (areas where shrubs have > 30% cover) | 2 structures: points = 1 | |
| <input checked="" type="checkbox"/> Forested (areas where trees have > 30% cover) | 1 structure: points = 0 | |
| <i>If the unit has a Forested class, check if:</i> | | |
| <input checked="" type="checkbox"/> 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. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- | | | |
|---|-------------------------------------|---|
| <input type="checkbox"/> Permanently flooded or inundated | 4 or more types present: points = 3 | 2 |
| <input type="checkbox"/> Seasonally flooded or inundated | 3 types present: points = 2 | |
| <input checked="" type="checkbox"/> Occasionally flooded or inundated | 2 types present: points = 1 | |
| <input checked="" type="checkbox"/> Saturated only | 1 type present: points = 0 | |
| <input checked="" type="checkbox"/> Permanently flowing stream or river in, or adjacent to, the wetland | | |
| <input type="checkbox"/> Seasonally flowing stream in, or adjacent to, the wetland | | |
| <input type="checkbox"/> Lake Fringe wetland | 2 points | |
| <input type="checkbox"/> Freshwater tidal wetland | 2 points | |

H 1.3. Richness of plant species

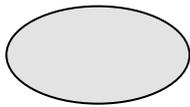
Count the number of plant species in the wetland that cover at least 10 ft².

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 milfoil, reed canarygrass, purple loosestrife, Canadian thistle

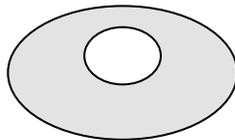
- | | | |
|------------------------------|------------|---|
| If you counted: > 19 species | points = 2 | 1 |
| 5 - 19 species | points = 1 | |
| < 5 species | points = 0 | |

H 1.4. Interspersion of habitats

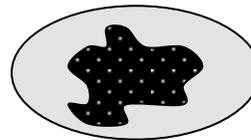
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



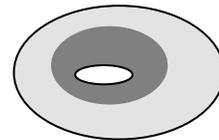
None = 0 points



Low = 1 point

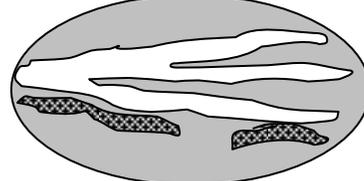
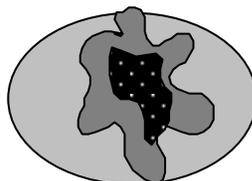
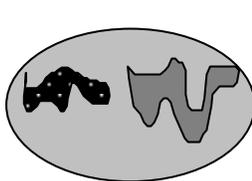


Moderate = 2 points



1

All three diagrams in this row are **HIGH** = 3points



Wetland name or number D/H

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input checked="" type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input checked="" type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input checked="" type="checkbox"/> 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)</p> <p><input checked="" type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input checked="" type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>	5
<p>Total for H 1</p>	<p>Add the points in the boxes above</p> <p>11</p>

Rating of Site Potential If score is: 15-18 = H 7-14 = M 0-6 = L *Record the rating on the first page*

<p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>	
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <input type="text" value="20.67"/> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>	2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.2"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <input type="text" value="51.72499999999999"/> %</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>	0
<p>Total for H 2</p>	<p>Add the points in the boxes above</p> <p>5</p>

Rating of Landscape Potential If score is: 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

<p>H 3.0. Is the habitat provided by the site valuable to society?</p>	
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p><input checked="" type="checkbox"/> It has 3 or more priority habitats within 100 m (see next page)</p> <p><input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p><input type="checkbox"/> It is mapped as a location for an individual WDFW priority species</p> <p><input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p><input type="checkbox"/> 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</p> <p>Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>	2

Rating of Value If score is: 2 = H 1 = M 0 = L *Record the rating on the first page*

Wetland name or number D/t

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

Wetland name or number D/t

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt <input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25) <input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland. <input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? <input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf <input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4 NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

Wetland name or number D/t

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has 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 ¾ 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 1/10 ac (4350 ft²) <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Wetland name or number E

RATING SUMMARY – Western Washington

Name of wetland (or ID #): E Date of site visit: 10/31/23
 Rated by Casey Lanier Trained by Ecology? Yes No Date of training 12/2021
 HGM Class used for rating Slope Wetland has multiple HGM classes? Y N

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

OVERALL WETLAND CATEGORY III (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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	L	L	L	
Landscape Potential	L	L	H	
Value	H	M	H	TOTAL
Score Based on Ratings	5	4	7	16

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number E

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number E

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number E

SLOPE WETLANDS

Water Quality Functions - Indicators that the site functions 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: <i>(a 1% slope has a 1 ft vertical drop in elevation for every 100 ft of horizontal distance)</i> Slope is 1% or less points = 3 Slope is > 1%-2% points = 2 Slope is > 2%-5% points = 1 Slope is greater than 5% points = 0	0	
S 1.2. <u>The soil 2 in below the surface (or duff layer)</u> is true clay or true organic (use NRCS definitions): Yes = 3 No = 0		3
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollutants: Choose the points appropriate for the description that best fits the plants in the wetland. <i>Dense means you have trouble seeing the soil surface (>75% cover), and uncut means not grazed or mowed and plants are higher than 6 in.</i> Dense, uncut, herbaceous plants > 90% of the wetland area points = 6 Dense, uncut, herbaceous plants > ½ of area points = 3 Dense, woody, plants > ½ of area points = 2 Dense, uncut, herbaceous plants > ¼ of area points = 1 Does not meet any of the criteria above for plants points = 0	2	
Total for S 1 Add the points in the boxes above		5

Rating of Site Potential If score is: 12 = H 6-11 = M X 0-5 = L

Record the rating on the first page

S 2.0. Does the landscape have the potential to support the water quality function of the site?		
S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in land uses that generate pollutants? Yes = 1 No = 0	0	
S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other sources _____ Yes = 1 No = 0	0	
Total for S 2 Add the points in the boxes above		0

Rating of Landscape Potential If score is: 1-2 = M X 0 = L

Record the rating on the first page

S 3.0. Is the water quality improvement provided by the site valuable to society?		
S 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 = 0	0	
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? <i>At least one aquatic resource in the basin is on the 303(d) list.</i> Yes = 1 No = 0	0	
S 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? <i>Answer YES if there is a TMDL for the basin in which unit is found.</i> Yes = 2 No = 0	2	
Total for S 3 Add the points in the boxes above		2

Rating of Value If score is: X 2-4 = H 1 = M 0 = L

Record the rating on the first page

Wetland name or number E

SLOPE WETLANDS

Hydrologic Functions - Indicators that the site functions to reduce flooding and stream erosion

S 4.0. Does the site have the potential to reduce flooding and stream erosion?

S 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. <i>Stems of plants should be thick enough (usually > 1/8 in), or dense enough, to remain erect during surface flows.</i>	0
Dense, uncut, rigid plants cover > 90% of the area of the wetland	
All other conditions	

points = 1
points = 0

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

Record the rating on the first page

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

S 5.1. Is more than 25% of the area within 150 ft upslope of wetland in land uses or cover that generate excess surface runoff?	0
---	---

Yes = 1 No = 0

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

Record the rating on the first page

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 redds)	1
Surface flooding problems are in a sub-basin farther down-gradient	
No flooding problems anywhere downstream	

points = 2
points = 1
points = 0

S 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan?	0
--	---

Yes = 2 No = 0

Total for S 6	1
---------------	---

Add the points in the boxes above

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

Record the rating on the first page

NOTES and FIELD OBSERVATIONS:

Wetland name or number E

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: *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 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
 - Emergent 3 structures: points = 2
 - Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1
 - Forested (areas where trees have > 30% cover) 1 structure: points = 0
- If the unit has a Forested class, check if:*
- 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

0

H 1.2. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- Permanently flooded or inundated 4 or more types present: points = 3
- Seasonally flooded or inundated 3 types present: points = 2
- Occasionally flooded or inundated 2 types present: points = 1
- Saturated only 1 type present: points = 0
- Permanently flowing stream or river in, or adjacent to, the wetland
- Seasonally flowing stream in, or adjacent to, the wetland
- Lake Fringe wetland** **2 points**
- Freshwater tidal wetland** **2 points**

0

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft².

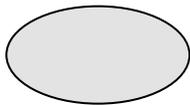
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

- If you counted: > 19 species points = 2
- 5 - 19 species points = 1
- < 5 species points = 0

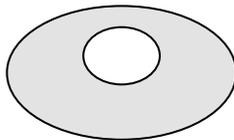
1

H 1.4. Interspersion of habitats

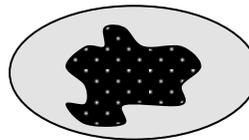
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



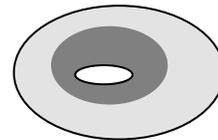
None = 0 points



Low = 1 point

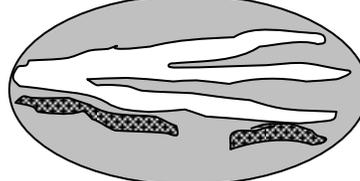
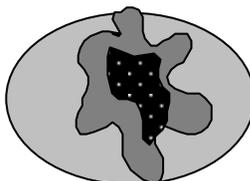
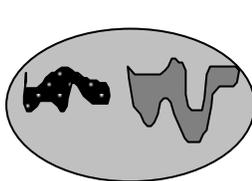


Moderate = 2 points



0

All three diagrams in this row are **HIGH** = 3points



Wetland name or number E

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input checked="" type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input checked="" type="checkbox"/> 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)</p> <p><input checked="" type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>	3
<p>Total for H 1</p>	<p>Add the points in the boxes above</p> <p>4</p>

Rating of Site Potential If score is: 15-18 = H 7-14 = M X 0-6 = L *Record the rating on the first page*

<p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>	
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <input type="text" value="20.67"/> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>	2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.2"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <input type="text" value="51.72499999999999"/> %</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>	0
<p>Total for H 2</p>	<p>Add the points in the boxes above</p> <p>5</p>

Rating of Landscape Potential If score is: X 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

<p>H 3.0. Is the habitat provided by the site valuable to society?</p>	
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p><input checked="" type="checkbox"/> It has 3 or more priority habitats within 100 m (see next page)</p> <p><input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p><input type="checkbox"/> It is mapped as a location for an individual WDFW priority species</p> <p><input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p><input type="checkbox"/> 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</p> <p>Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>	2

Rating of Value If score is: X 2 = H 1 = M 0 = L *Record the rating on the first page*

Wetland name or number E

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

Wetland name or number E

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt</p> <p style="text-align: right;"><input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25)</p> <p><input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland.</p> <p><input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4</p> <p>NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

Wetland name or number E

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has 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 ¾ 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 1/10 ac (4350 ft²) <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Wetland name or number F

RATING SUMMARY – Western Washington

Name of wetland (or ID #): F Date of site visit: 10/25/23
 Rated by Rachael Hyland, Amanda Smith Trained by Ecology? Yes No Date of training 3/2019
 HGM Class used for rating Depressional Wetland has multiple HGM classes? Y N

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

OVERALL WETLAND CATEGORY III (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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	M	L	M	
Landscape Potential	L	L	H	
Value	H	M	M	TOTAL
Score Based on Ratings	6	4	7	17

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number F

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number F

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number F

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?	
D 1.1. <u>Characteristics of surface water outflows from the wetland:</u> Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. 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.	points = 3 points = 2 points = 1 points = 1 3
D 1.2. <u>The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions).</u> Yes = 4 No = 0	0
D 1.3. <u>Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes):</u> Wetland 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	points = 5 points = 3 points = 1 points = 0 3
D 1.4. <u>Characteristics of seasonal ponding or inundation:</u> <i>This is the area that is ponded for at least 2 months. See description in manual.</i> Area seasonally ponded is > 1/2 total area of wetland Area seasonally ponded is > 1/4 total area of wetland Area seasonally ponded is < 1/4 total area of wetland	points = 4 points = 2 points = 0 2
Total for D 1	8 Add the points in the boxes above

Rating of Site Potential If score is: 12-16 = H X 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?	
D 2.1. Does the wetland unit receive stormwater discharges?	Yes = 1 No = 0 0
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants?	Yes = 1 No = 0 0
D 2.3. Are there septic systems within 250 ft of the wetland?	Yes = 1 No = 0 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 _____	Yes = 1 No = 0 0
Total for D 2	0 Add the points in the boxes above

Rating of Landscape Potential If score is: 3 or 4 = H 1 or 2 = M X 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 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 = 0 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
D 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 basin in which the unit is found)?	Yes = 2 No = 0 2
Total for D 3	2 Add the points in the boxes above

Rating of Value If score is: X 2-4 = H 1 = M 0 = L Record the rating on the first page

NOTES and FIELD OBSERVATIONS:

Wetland name or number F

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. Characteristics of surface water outflows from the wetland:		
Wetland is a depression or flat depression with no surface water leaving it (no outlet)	points = 4	4
Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet	points = 2	
Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch	points = 1	
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	
D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part.		
Marks of ponding are 3 ft or more above the surface or bottom of outlet	points = 7	0
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 "headwater" wetland	points = 3	
Wetland is flat but has small depressions on the surface that trap water	points = 1	
Marks of ponding less than 0.5 ft (6 in)	points = 0	
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 less than 10 times the area of the unit	points = 5	0
The area of the basin is 10 to 100 times the area of the unit	points = 3	
The area of the basin is more than 100 times the area of the unit	points = 0	
Entire wetland is in the Flats class	points = 5	
Total for D 4	Add the points in the boxes above	4

Rating of Site Potential If score is: 12-16 = H 6-11 = M X 0-5 = L Record the rating on the 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?	Yes = 1 No = 0	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
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)?	Yes = 1 No = 0	0
Total for D 5	Add the points in the boxes above	0

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

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 around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met.		
The wetland 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):		1
• Flooding occurs in a sub-basin that is immediately down-gradient of unit.	points = 2	
• Surface flooding problems are in a sub-basin farther down-gradient.	points = 1	
Flooding from groundwater is an issue in the sub-basin.	points = 1	
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 _____	points = 0	
There are no problems with flooding downstream of the wetland.	points = 0	
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 = 0	0
Total for D 6	Add the points in the boxes above	1

Rating of Value If score is: 2-4 = H X 1 = M 0 = L Record the rating on the first page

Wetland name or number F

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: *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 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
 - Emergent 3 structures: points = 2
 - Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1
 - Forested (areas where trees have > 30% cover) 1 structure: points = 0
- If the unit has a Forested class, check if:*
- 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

1

H 1.2. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- Permanently flooded or inundated 4 or more types present: points = 3
- Seasonally flooded or inundated 3 types present: points = 2
- Occasionally flooded or inundated 2 types present: points = 1
- Saturated only 1 type present: points = 0
- Permanently flowing stream or river in, or adjacent to, the wetland
- Seasonally flowing stream in, or adjacent to, the wetland
- Lake Fringe wetland** **2 points**
- Freshwater tidal wetland** **2 points**

1

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft².

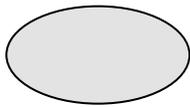
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

- If you counted: > 19 species points = 2
- 5 - 19 species points = 1
- < 5 species points = 0

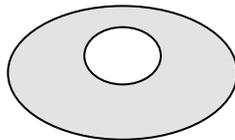
1

H 1.4. Interspersion of habitats

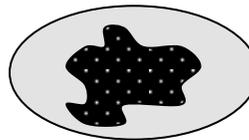
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



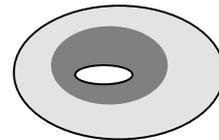
None = 0 points



Low = 1 point

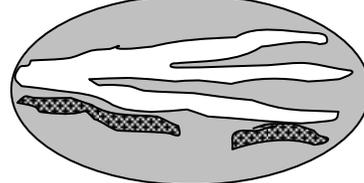
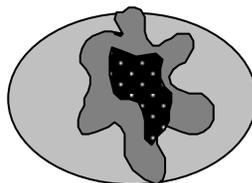
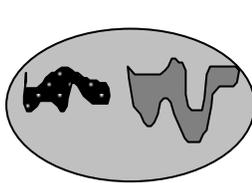


Moderate = 2 points



1

All three diagrams in this row are **HIGH** = 3points



Wetland name or number F

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input checked="" type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input checked="" type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input type="checkbox"/> 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)</p> <p><input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input checked="" type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>	3
<p>Total for H 1</p>	<p>Add the points in the boxes above</p> <p>7</p>

Rating of Site Potential If score is: 15-18 = H 7-14 = M 0-6 = L *Record the rating on the first page*

<p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>	
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <input type="text" value="20.67"/> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>	2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.20"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <input type="text" value="51.72499999999999"/> %</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>	0
<p>Total for H 2</p>	<p>Add the points in the boxes above</p> <p>5</p>

Rating of Landscape Potential If score is: 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

<p>H 3.0. Is the habitat provided by the site valuable to society?</p>	
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p>— It has 3 or more priority habitats within 100 m (see next page)</p> <p>— It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p>— It is mapped as a location for an individual WDFW priority species</p> <p>— It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p>— 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</p> <p><input checked="" type="checkbox"/> Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>	1

Rating of Value If score is: 2 = H 1 = M 0 = L *Record the rating on the first page*

Wetland name or number F

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

Wetland name or number F

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt</p> <p style="text-align: right;"><input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25)</p> <p><input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland.</p> <p><input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4</p> <p>NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

Wetland name or number F

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has 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 ¾ 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 1/10 ac (4350 ft²) <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Wetland name or number G

RATING SUMMARY – Western Washington

Name of wetland (or ID #): G Date of site visit: 10/31/23
 Rated by Rachael Hyland, Amanda Smith Trained by Ecology? Yes No Date of training 3/2019
 HGM Class used for rating Slope Wetland has multiple HGM classes? Y N

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

OVERALL WETLAND CATEGORY III (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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	L	L	M	
Landscape Potential	L	L	H	
Value	H	M	H	TOTAL
Score Based on Ratings	5	4	8	17

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number G

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number G

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number G

SLOPE WETLANDS

Water Quality Functions - Indicators that the site functions 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: <i>(a 1% slope has a 1 ft vertical drop in elevation for every 100 ft of horizontal distance)</i>		0
Slope is 1% or less	points = 3	
Slope is > 1%-2%	points = 2	
Slope is > 2%-5%	points = 1	
Slope is greater than 5%	points = 0	
S 1.2. <u>The soil 2 in below the surface (or duff layer)</u> is true clay or true organic <i>(use NRCS definitions)</i> : Yes = 3 No = 0		3
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollutants: Choose the points appropriate for the description that best fits the plants in the wetland. <i>Dense means you have trouble seeing the soil surface (>75% cover), and uncut means not grazed or mowed and plants are higher than 6 in.</i>		1
Dense, uncut, herbaceous plants > 90% of the wetland area	points = 6	
Dense, uncut, herbaceous plants > ½ of area	points = 3	
Dense, woody, plants > ½ of area	points = 2	
Dense, uncut, herbaceous plants > ¼ of area	points = 1	
Does not meet any of the criteria above for plants	points = 0	
Total for S 1		4

Rating of Site Potential If score is: 12 = H 6-11 = M X 0-5 = L

Record the rating on the first page

S 2.0. Does the landscape have the potential to support the water quality function of the site?		
S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in land uses that generate pollutants?	Yes = 1 No = 0	0
S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other sources _____	Yes = 1 No = 0	0
Total for S 2		0

Rating of Landscape Potential If score is: 1-2 = M X 0 = L

Record the rating on the first page

S 3.0. Is the water quality improvement provided by the site valuable to society?		
S 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 = 0	0
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? <i>At least one aquatic resource in the basin is on the 303(d) list.</i>	Yes = 1 No = 0	0
S 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? <i>Answer YES if there is a TMDL for the basin in which unit is found.</i>	Yes = 2 No = 0	2
Total for S 3		2

Rating of Value If score is: X 2-4 = H 1 = M 0 = L

Record the rating on the first page

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: *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 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
 - Emergent 3 structures: points = 2
 - Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1
 - Forested (areas where trees have > 30% cover) 1 structure: points = 0
- If the unit has a Forested class, check if:*
- 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

1

H 1.2. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- Permanently flooded or inundated 4 or more types present: points = 3
- Seasonally flooded or inundated 3 types present: points = 2
- Occasionally flooded or inundated 2 types present: points = 1
- Saturated only 1 type present: points = 0
- Permanently flowing stream or river in, or adjacent to, the wetland
- Seasonally flowing stream in, or adjacent to, the wetland
- Lake Fringe wetland** **2 points**
- Freshwater tidal wetland** **2 points**

1

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft².

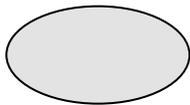
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

- If you counted: > 19 species points = 2
- 5 - 19 species points = 1
- < 5 species points = 0

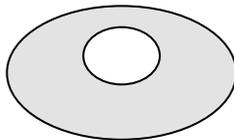
1

H 1.4. Interspersion of habitats

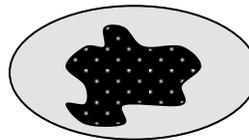
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



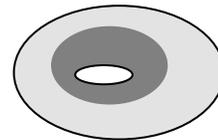
None = 0 points



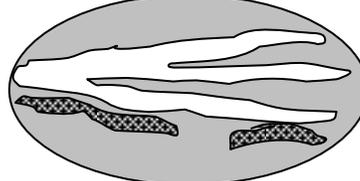
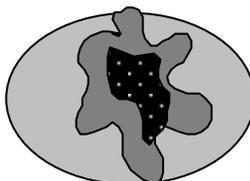
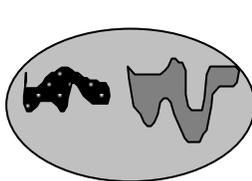
Low = 1 point



Moderate = 2 points



All three diagrams in this row are **HIGH** = 3points



1

Wetland name or number G

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input checked="" type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input checked="" type="checkbox"/> 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)</p> <p><input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input checked="" type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>	3
<p>Total for H 1</p>	<p>Add the points in the boxes above</p> <p>7</p>

Rating of Site Potential If score is: 15-18 = H 7-14 = M 0-6 = L *Record the rating on the first page*

<p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>	
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <input type="text" value="20.67"/> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>	2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.20"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <input type="text" value="51.72499999999999"/> %</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>	0
<p>Total for H 2</p>	<p>Add the points in the boxes above</p> <p>5</p>

Rating of Landscape Potential If score is: 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

<p>H 3.0. Is the habitat provided by the site valuable to society?</p>	
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p><input checked="" type="checkbox"/> It has 3 or more priority habitats within 100 m (see next page)</p> <p><input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p><input type="checkbox"/> It is mapped as a location for an individual WDFW priority species</p> <p><input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p><input type="checkbox"/> 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</p> <p>Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>	2

Rating of Value If score is: 2 = H 1 = M 0 = L *Record the rating on the first page*

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt <input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25) <input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland. <input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? <input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf <input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4 NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

Wetland name or number G

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has 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 ¾ 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 1/10 ac (4350 ft²) <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Wetland name or number I

RATING SUMMARY – Western Washington

Name of wetland (or ID #): I Date of site visit: 10/31/23
 Rated by Casey Lanier, Catherine Mills Trained by Ecology? Yes No Date of training 12/2021
 HGM Class used for rating Slope Wetland has multiple HGM classes? Y N

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

OVERALL WETLAND CATEGORY III (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
 X Category III – Total score = 16 - 19
 Category IV – Total score = 9 - 15

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	L	L	M	
Landscape Potential	L	L	H	
Value	H	M	H	TOTAL
Score Based on Ratings	5	4	8	17

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number 1

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number 1

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number I

SLOPE WETLANDS

Water Quality Functions - Indicators that the site functions 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: <i>(a 1% slope has a 1 ft vertical drop in elevation for every 100 ft of horizontal distance)</i> Slope is 1% or less points = 3 Slope is > 1%-2% points = 2 Slope is > 2%-5% points = 1 Slope is greater than 5% points = 0	0	
S 1.2. <u>The soil 2 in below the surface (or duff layer)</u> is true clay or true organic <i>(use NRCS definitions)</i> : Yes = 3 No = 0		3
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollutants: Choose the points appropriate for the description that best fits the plants in the wetland. <i>Dense means you have trouble seeing the soil surface (>75% cover), and uncut means not grazed or mowed and plants are higher than 6 in.</i> Dense, uncut, herbaceous plants > 90% of the wetland area points = 6 Dense, uncut, herbaceous plants > ½ of area points = 3 Dense, woody, plants > ½ of area points = 2 Dense, uncut, herbaceous plants > ¼ of area points = 1 Does not meet any of the criteria above for plants points = 0	2	
Total for S 1		5

Rating of Site Potential If score is: 12 = H 6-11 = M X 0-5 = L

Record the rating on the first page

S 2.0. Does the landscape have the potential to support the water quality function of the site?		
S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in land uses that generate pollutants? Yes = 1 No = 0	0	
S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other sources _____ Yes = 1 No = 0	0	
Total for S 2		0

Rating of Landscape Potential If score is: 1-2 = M X 0 = L

Record the rating on the first page

S 3.0. Is the water quality improvement provided by the site valuable to society?		
S 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 = 0	0	
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? <i>At least one aquatic resource in the basin is on the 303(d) list.</i> Yes = 1 No = 0	0	
S 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? <i>Answer YES if there is a TMDL for the basin in which unit is found.</i> Yes = 2 No = 0	2	
Total for S 3		2

Rating of Value If score is: X 2-4 = H 1 = M 0 = L

Record the rating on the first page

Wetland name or number 1

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: *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 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
 - Emergent 3 structures: points = 2
 - Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1
 - Forested (areas where trees have > 30% cover) 1 structure: points = 0
- If the unit has a Forested class, check if:*
- 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

0

H 1.2. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- Permanently flooded or inundated 4 or more types present: points = 3
- Seasonally flooded or inundated 3 types present: points = 2
- Occasionally flooded or inundated 2 types present: points = 1
- Saturated only 1 type present: points = 0
- Permanently flowing stream or river in, or adjacent to, the wetland
- Seasonally flowing stream in, or adjacent to, the wetland
- Lake Fringe wetland** **2 points**
- Freshwater tidal wetland** **2 points**

1

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft².

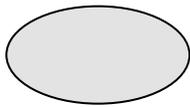
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

- If you counted: > 19 species points = 2
- 5 - 19 species points = 1
- < 5 species points = 0

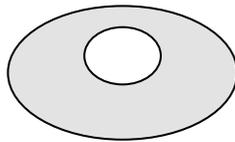
1

H 1.4. Interspersion of habitats

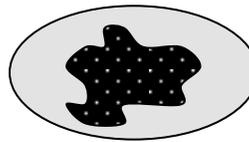
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



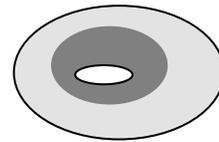
None = 0 points



Low = 1 point

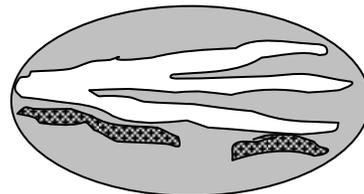
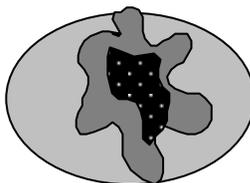
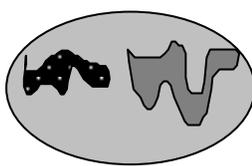


Moderate = 2 points



0

All three diagrams in this row are **HIGH** = 3points



Wetland name or number I

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input checked="" type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input checked="" type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input checked="" type="checkbox"/> 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)</p> <p><input checked="" type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input checked="" type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>	5
<p>Total for H 1</p>	<p>Add the points in the boxes above</p> <p>7</p>

Rating of Site Potential If score is: 15-18 = H 7-14 = M 0-6 = L *Record the rating on the first page*

<p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>	
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <input type="text" value="20.67"/> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>	2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.2"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <input type="text" value="51.72499999999999"/> %</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>	0
<p>Total for H 2</p>	<p>Add the points in the boxes above</p> <p>5</p>

Rating of Landscape Potential If score is: 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

<p>H 3.0. Is the habitat provided by the site valuable to society?</p>	
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p><input checked="" type="checkbox"/> It has 3 or more priority habitats within 100 m (see next page)</p> <p><input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p><input type="checkbox"/> It is mapped as a location for an individual WDFW priority species</p> <p><input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p><input type="checkbox"/> 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</p> <p>Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>	2

Rating of Value If score is: 2 = H 1 = M 0 = L *Record the rating on the first page*

Wetland name or number 1

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

Wetland name or number I

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt <input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25) <input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. <input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? <input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf <input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4 NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

Wetland name or number I

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has 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 ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. — The wetland is larger than 1/10 ac (4350 ft²) <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Wetland name or number J

RATING SUMMARY – Western Washington

Name of wetland (or ID #): J Date of site visit: _____
 Rated by Casey Lanier, Garret Jordan Trained by Ecology? Yes No Date of training 12/2021
 HGM Class used for rating Depressional Wetland has multiple HGM classes? Y N

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

OVERALL WETLAND CATEGORY III (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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	L	L	L	
Landscape Potential	L	L	H	
Value	H	M	H	TOTAL
Score Based on Ratings	5	4	7	16

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number J

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number J

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number J

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?		
D 1.1. <u>Characteristics of surface water outflows from the wetland:</u> Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. 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.	points = 3 points = 2 points = 1 points = 1	2
D 1.2. <u>The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions).</u> Yes = 4 No = 0		0
D 1.3. <u>Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes):</u> Wetland has persistent, ungrazed, plants > 95% of area Wetland has persistent, ungrazed, plants > ½ of area Wetland has persistent, ungrazed plants > 1/10 of area Wetland has persistent, ungrazed plants < 1/10 of area	points = 5 points = 3 points = 1 points = 0	3
D 1.4. <u>Characteristics of seasonal ponding or inundation:</u> <i>This is the area that is ponded for at least 2 months. See description in manual.</i> Area seasonally ponded is > ½ total area of wetland Area seasonally ponded is > ¼ total area of wetland Area seasonally ponded is < ¼ total area of wetland	points = 4 points = 2 points = 0	0
Total for D 1		5

Rating of Site Potential If score is: 12-16 = H 6-11 = M X 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?		
D 2.1. Does the wetland unit receive stormwater discharges?	Yes = 1 No = 0	0
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants?	Yes = 1 No = 0	0
D 2.3. Are there septic systems within 250 ft of the wetland?	Yes = 1 No = 0	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 _____	Yes = 1 No = 0	0
Total for D 2		0

Rating of Landscape Potential If score is: 3 or 4 = H 1 or 2 = M X 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 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 = 0	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
D 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 basin in which the unit is found)?	Yes = 2 No = 0	2
Total for D 3		2

Rating of Value If score is: X 2-4 = H 1 = M 0 = L Record the rating on the first page

NOTES and FIELD OBSERVATIONS:

Wetland name or number J

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. Characteristics of surface water outflows from the wetland:		
Wetland is a depression or flat depression with no surface water leaving it (no outlet)	points = 4	2
Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet	points = 2	
Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch	points = 1	
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	
D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part.		
Marks of ponding are 3 ft or more above the surface or bottom of outlet	points = 7	3
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 "headwater" wetland	points = 3	
Wetland is flat but has small depressions on the surface that trap water	points = 1	
Marks of ponding less than 0.5 ft (6 in)	points = 0	
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 less than 10 times the area of the unit	points = 5	0
The area of the basin is 10 to 100 times the area of the unit	points = 3	
The area of the basin is more than 100 times the area of the unit	points = 0	
Entire wetland is in the Flats class	points = 5	
Total for D 4	Add the points in the boxes above	5

Rating of Site Potential If score is: 12-16 = H 6-11 = M X 0-5 = L Record the rating on the 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?	Yes = 1 No = 0	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
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)?	Yes = 1 No = 0	0
Total for D 5	Add the points in the boxes above	0

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

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 around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met.		
The wetland 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):		1
• Flooding occurs in a sub-basin that is immediately down-gradient of unit.	points = 2	
• Surface flooding problems are in a sub-basin farther down-gradient.	points = 1	
Flooding from groundwater is an issue in the sub-basin.	points = 1	
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 _____	points = 0	
There are no problems with flooding downstream of the wetland.	points = 0	
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 = 0	0
Total for D 6	Add the points in the boxes above	1

Rating of Value If score is: 2-4 = H X 1 = M 0 = L Record the rating on the first page

Wetland name or number J

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: *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 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
 - Emergent 3 structures: points = 2
 - Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1
 - Forested (areas where trees have > 30% cover) 1 structure: points = 0
- If the unit has a Forested class, check if:*
- 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

0

H 1.2. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- Permanently flooded or inundated 4 or more types present: points = 3
- Seasonally flooded or inundated 3 types present: points = 2
- Occasionally flooded or inundated 2 types present: points = 1
- Saturated only 1 type present: points = 0
- Permanently flowing stream or river in, or adjacent to, the wetland
- Seasonally flowing stream in, or adjacent to, the wetland
- Lake Fringe wetland** **2 points**
- Freshwater tidal wetland** **2 points**

0

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft².

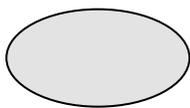
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

- If you counted: > 19 species points = 2
- 5 - 19 species points = 1
- < 5 species points = 0

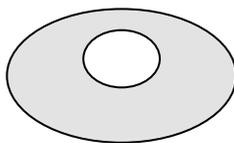
1

H 1.4. Interspersion of habitats

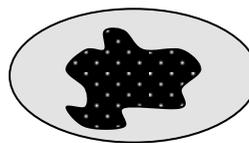
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



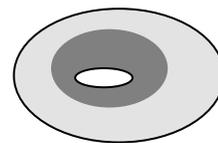
None = 0 points



Low = 1 point

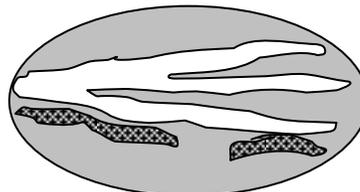
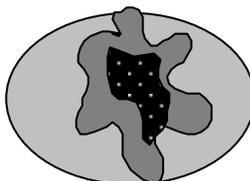
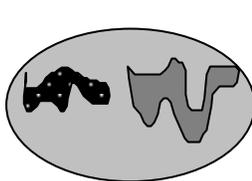


Moderate = 2 points



0

All three diagrams in this row are **HIGH** = 3points



Wetland name or number J

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input type="checkbox"/> 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)</p> <p><input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>	0
<p>Total for H 1</p>	<p>Add the points in the boxes above</p> <p>1</p>

Rating of Site Potential If score is: 15-18 = H 7-14 = M X 0-6 = L *Record the rating on the first page*

<p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>	
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <u>20.67</u> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>	2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.2"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <u>51.7249999999999%</u></p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>	0
<p>Total for H 2</p>	<p>Add the points in the boxes above</p> <p>5</p>

Rating of Landscape Potential If score is: X 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

<p>H 3.0. Is the habitat provided by the site valuable to society?</p>	
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p><u> X </u> It has 3 or more priority habitats within 100 m (see next page)</p> <p><u> </u> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p><u> </u> It is mapped as a location for an individual WDFW priority species</p> <p><u> </u> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p><u> </u> 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</p> <p>Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>	2

Rating of Value If score is: X 2 = H 1 = M 0 = L *Record the rating on the first page*

Wetland name or number J

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

Wetland name or number J

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt</p> <p style="text-align: right;"><input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25)</p> <p><input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland.</p> <p><input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4</p> <p>NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

Wetland name or number J

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has 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 ¾ 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 1/10 ac (4350 ft²) <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Wetland name or number K

RATING SUMMARY – Western Washington

Name of wetland (or ID #): K Date of site visit: 11/08/2023
 Rated by Casey Lanier / Garret Jordan Trained by Ecology? Yes No Date of training 12/2021
 HGM Class used for rating Depressional Wetland has multiple HGM classes? Y N

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

OVERALL WETLAND CATEGORY III (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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	M	L	L	
Landscape Potential	L	L	H	
Value	H	M	H	TOTAL
Score Based on Ratings	6	4	7	17

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number K

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number K

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number K

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?	
D 1.1. <u>Characteristics of surface water outflows from the wetland:</u> Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. 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.	points = 3 points = 2 points = 1 points = 1
D 1.2. <u>The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions).</u> Yes = 4 No = 0	4
D 1.3. <u>Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes):</u> Wetland 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	points = 5 points = 3 points = 1 points = 0
D 1.4. <u>Characteristics of seasonal ponding or inundation:</u> <i>This is the area that is ponded for at least 2 months. See description in manual.</i> Area seasonally ponded is > 1/2 total area of wetland Area seasonally ponded is > 1/4 total area of wetland Area seasonally ponded is < 1/4 total area of wetland	points = 4 points = 2 points = 0
Total for D 1	Add the points in the boxes above 10

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?	
D 2.1. Does the wetland unit receive stormwater discharges?	Yes = 1 No = 0 0
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants?	Yes = 1 No = 0 0
D 2.3. Are there septic systems within 250 ft of the wetland?	Yes = 1 No = 0 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 _____	Yes = 1 No = 0 0
Total for D 2	Add the points in the boxes above 0

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 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 = 0 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
D 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 basin in which the unit is found)?	Yes = 2 No = 0 2
Total for D 3	Add the points in the boxes above 2

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

NOTES and FIELD OBSERVATIONS:

Wetland name or number K

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. Characteristics of surface water outflows from the wetland:		
Wetland is a depression or flat depression with no surface water leaving it (no outlet)	points = 4	1
Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet	points = 2	
Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch	points = 1	
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	
D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part.		
Marks of ponding are 3 ft or more above the surface or bottom of outlet	points = 7	0
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 "headwater" wetland	points = 3	
Wetland is flat but has small depressions on the surface that trap water	points = 1	
Marks of ponding less than 0.5 ft (6 in)	points = 0	
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 less than 10 times the area of the unit	points = 5	0
The area of the basin is 10 to 100 times the area of the unit	points = 3	
The area of the basin is more than 100 times the area of the unit	points = 0	
Entire wetland is in the Flats class	points = 5	
Total for D 4	Add the points in the boxes above	1

Rating of Site Potential If score is: 12-16 = H 6-11 = M X 0-5 = L Record the rating on the 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?	Yes = 1 No = 0	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
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)?	Yes = 1 No = 0	0
Total for D 5	Add the points in the boxes above	0

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

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 around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met.		
The wetland 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):		1
• Flooding occurs in a sub-basin that is immediately down-gradient of unit.	points = 2	
• Surface flooding problems are in a sub-basin farther down-gradient.	points = 1	
Flooding from groundwater is an issue in the sub-basin.	points = 1	
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 _____	points = 0	
There are no problems with flooding downstream of the wetland.	points = 0	
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 = 0	0
Total for D 6	Add the points in the boxes above	1

Rating of Value If score is: 2-4 = H X 1 = M 0 = L Record the rating on the first page

Wetland name or number K

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: *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 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
 - Emergent 3 structures: points = 2
 - Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1
 - Forested (areas where trees have > 30% cover) 1 structure: points = 0
- If the unit has a Forested class, check if:*
- 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

1

H 1.2. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- Permanently flooded or inundated 4 or more types present: points = 3
- Seasonally flooded or inundated 3 types present: points = 2
- Occasionally flooded or inundated 2 types present: points = 1
- Saturated only 1 type present: points = 0
- Permanently flowing stream or river in, or adjacent to, the wetland
- Seasonally flowing stream in, or adjacent to, the wetland
- Lake Fringe wetland** **2 points**
- Freshwater tidal wetland** **2 points**

0

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft².

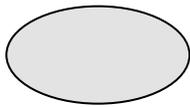
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

- If you counted: > 19 species points = 2
- 5 - 19 species points = 1
- < 5 species points = 0

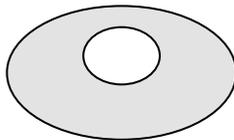
1

H 1.4. Interspersion of habitats

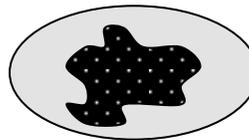
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



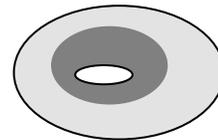
None = 0 points



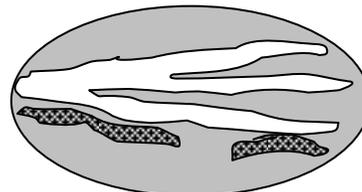
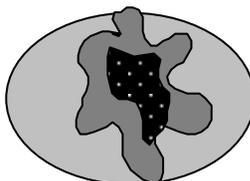
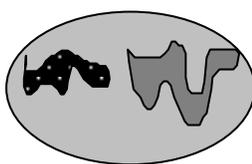
Low = 1 point



Moderate = 2 points



All three diagrams in this row are **HIGH** = 3points



1

Wetland name or number K

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input checked="" type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input checked="" type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input type="checkbox"/> 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)</p> <p><input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input checked="" type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>		3
Total for H 1	Add the points in the boxes above	6

Rating of Site Potential If score is: 15-18 = H 7-14 = M 0-6 = L *Record the rating on the first page*

H 2.0. Does the landscape have the potential to support the habitat functions of the site?			
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <input type="text" value="20.67"/> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>			2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.2"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <input type="text" value="51.72499999999999"/> %</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>			3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>			0
Total for H 2	Add the points in the boxes above	5	

Rating of Landscape Potential If score is: 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

H 3.0. Is the habitat provided by the site valuable to society?			
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p><input checked="" type="checkbox"/> It has 3 or more priority habitats within 100 m (see next page)</p> <p><input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p><input type="checkbox"/> It is mapped as a location for an individual WDFW priority species</p> <p><input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p><input type="checkbox"/> 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</p> <p>Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>			2

Rating of Value If score is: 2 = H 1 = M 0 = L *Record the rating on the first page*

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

Wetland name or number K

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt</p> <p style="text-align: right;"><input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25)</p> <p><input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland.</p> <p><input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4</p> <p>NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

Wetland name or number K

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has 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 ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. — The wetland is larger than 1/10 ac (4350 ft²) <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Wetland name or number L

RATING SUMMARY – Western Washington

Name of wetland (or ID #): L Date of site visit: 10/31/23
 Rated by Rachael Hyland, Amanda Smith Trained by Ecology? Yes No Date of training 3/2019
 HGM Class used for rating Slope Wetland has multiple HGM classes? Y N

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

OVERALL WETLAND CATEGORY III (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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	L	L	L	
Landscape Potential	L	L	H	
Value	H	M	H	TOTAL
Score Based on Ratings	5	4	7	16

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number L

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number L

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number L

SLOPE WETLANDS

Water Quality Functions - Indicators that the site functions 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: <i>(a 1% slope has a 1 ft vertical drop in elevation for every 100 ft of horizontal distance)</i> Slope is 1% or less points = 3 Slope is > 1%-2% points = 2 Slope is > 2%-5% points = 1 Slope is greater than 5% points = 0	0	
S 1.2. <u>The soil 2 in below the surface (or duff layer)</u> is true clay or true organic <i>(use NRCS definitions)</i> : Yes = 3 No = 0		3
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollutants: Choose the points appropriate for the description that best fits the plants in the wetland. <i>Dense means you have trouble seeing the soil surface (>75% cover), and uncut means not grazed or mowed and plants are higher than 6 in.</i> Dense, uncut, herbaceous plants > 90% of the wetland area points = 6 Dense, uncut, herbaceous plants > ½ of area points = 3 Dense, woody, plants > ½ of area points = 2 Dense, uncut, herbaceous plants > ¼ of area points = 1 Does not meet any of the criteria above for plants points = 0	2	
Total for S 1 Add the points in the boxes above		5

Rating of Site Potential If score is: 12 = H 6-11 = M X 0-5 = L

Record the rating on the first page

S 2.0. Does the landscape have the potential to support the water quality function of the site?		
S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in land uses that generate pollutants? Yes = 1 No = 0	0	
S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other sources _____ Yes = 1 No = 0	0	
Total for S 2 Add the points in the boxes above		0

Rating of Landscape Potential If score is: 1-2 = M X 0 = L

Record the rating on the first page

S 3.0. Is the water quality improvement provided by the site valuable to society?		
S 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 = 0	0	
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? <i>At least one aquatic resource in the basin is on the 303(d) list.</i> Yes = 1 No = 0	0	
S 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? <i>Answer YES if there is a TMDL for the basin in which unit is found.</i> Yes = 2 No = 0	2	
Total for S 3 Add the points in the boxes above		2

Rating of Value If score is: X 2-4 = H 1 = M 0 = L

Record the rating on the first page

Wetland name or number L

SLOPE WETLANDS

Hydrologic Functions - Indicators that the site functions to reduce flooding and stream erosion

S 4.0. Does the site have the potential to reduce flooding and stream erosion?

S 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. <i>Stems of plants should be thick enough (usually > 1/8 in), or dense enough, to remain erect during surface flows.</i>	0
Dense, uncut, rigid plants cover > 90% of the area of the wetland	
All other conditions	

points = 1
points = 0

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

Record the rating on the first page

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

S 5.1. Is more than 25% of the area within 150 ft upslope of wetland in land uses or cover that generate excess surface runoff?	0
---	---

Yes = 1 No = 0

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

Record the rating on the first page

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 redds)	1
Surface flooding problems are in a sub-basin farther down-gradient	
No flooding problems anywhere downstream	

points = 2
points = 1
points = 0

S 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan?	0
--	---

Yes = 2 No = 0

Total for S 6	1
---------------	---

Add the points in the boxes above

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

Record the rating on the first page

NOTES and FIELD OBSERVATIONS:

Wetland name or number

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: *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 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
 - Emergent 3 structures: points = 2
 - Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1
 - Forested (areas where trees have > 30% cover) 1 structure: points = 0
- If the unit has a Forested class, check if:*
- 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

0

H 1.2. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- Permanently flooded or inundated 4 or more types present: points = 3
- Seasonally flooded or inundated 3 types present: points = 2
- Occasionally flooded or inundated 2 types present: points = 1
- Saturated only 1 type present: points = 0
- Permanently flowing stream or river in, or adjacent to, the wetland
- Seasonally flowing stream in, or adjacent to, the wetland
- Lake Fringe wetland** **2 points**
- Freshwater tidal wetland** **2 points**

1

H 1.3. Richness of plant species

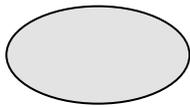
Count the number of plant species in the wetland that cover at least 10 ft². *Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle*

- If you counted: > 19 species points = 2
- 5 - 19 species points = 1
- < 5 species points = 0

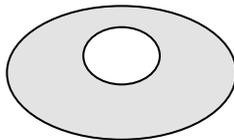
1

H 1.4. Interspersion of habitats

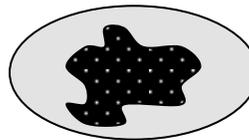
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



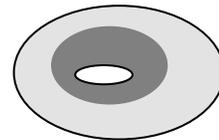
None = 0 points



Low = 1 point

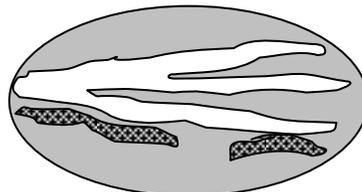
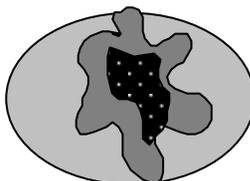
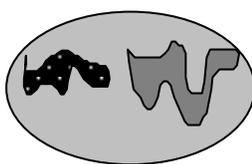


Moderate = 2 points



0

All three diagrams in this row are **HIGH** = 3points



Wetland name or number L

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input checked="" type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input checked="" type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input checked="" type="checkbox"/> 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)</p> <p><input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>	3
<p>Total for H 1</p>	<p>Add the points in the boxes above</p> <p>5</p>

Rating of Site Potential If score is: 15-18 = H 7-14 = M 0-6 = L *Record the rating on the first page*

<p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>	
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <input type="text" value="20.67"/> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>	2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.2"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <input type="text" value="51.72499999999999"/> %</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>	0
<p>Total for H 2</p>	<p>Add the points in the boxes above</p> <p>5</p>

Rating of Landscape Potential If score is: 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

<p>H 3.0. Is the habitat provided by the site valuable to society?</p>	
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p><input checked="" type="checkbox"/> It has 3 or more priority habitats within 100 m (see next page)</p> <p><input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p><input type="checkbox"/> It is mapped as a location for an individual WDFW priority species</p> <p><input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p><input type="checkbox"/> 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</p> <p>Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>	2

Rating of Value If score is: 2 = H 1 = M 0 = L *Record the rating on the first page*

Wetland name or number L

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

Wetland name or number L

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt</p> <p style="text-align: right;"><input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25)</p> <p><input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland.</p> <p><input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4</p> <p>NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

Wetland name or number L

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has 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 ¾ 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 1/10 ac (4350 ft²) <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Wetland name or number M

RATING SUMMARY – Western Washington

Name of wetland (or ID #): M Date of site visit: 10/31/23
 Rated by Rachael Hyland, Amanda Smith Trained by Ecology? Yes No Date of training 3/2019
 HGM Class used for rating Slope Wetland has multiple HGM classes? Y N

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

OVERALL WETLAND CATEGORY III (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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	L	L	L	
Landscape Potential	L	L	H	
Value	H	M	H	TOTAL
Score Based on Ratings	5	4	7	16

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number M

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number M

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number M

SLOPE WETLANDS

Water Quality Functions - Indicators that the site functions 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: <i>(a 1% slope has a 1 ft vertical drop in elevation for every 100 ft of horizontal distance)</i> Slope is 1% or less points = 3 Slope is > 1%-2% points = 2 Slope is > 2%-5% points = 1 Slope is greater than 5% points = 0	0	
S 1.2. <u>The soil 2 in below the surface (or duff layer)</u> is true clay or true organic <i>(use NRCS definitions)</i> : Yes = 3 No = 0		0
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollutants: Choose the points appropriate for the description that best fits the plants in the wetland. <i>Dense means you have trouble seeing the soil surface (>75% cover), and uncut means not grazed or mowed and plants are higher than 6 in.</i> Dense, uncut, herbaceous plants > 90% of the wetland area points = 6 Dense, uncut, herbaceous plants > ½ of area points = 3 Dense, woody, plants > ½ of area points = 2 Dense, uncut, herbaceous plants > ¼ of area points = 1 Does not meet any of the criteria above for plants points = 0	2	
Total for S 1		2

Rating of Site Potential If score is: 12 = H 6-11 = M X 0-5 = L

Record the rating on the first page

S 2.0. Does the landscape have the potential to support the water quality function of the site?		
S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in land uses that generate pollutants? Yes = 1 No = 0	0	
S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other sources _____ Yes = 1 No = 0	0	
Total for S 2		0

Rating of Landscape Potential If score is: 1-2 = M X 0 = L

Record the rating on the first page

S 3.0. Is the water quality improvement provided by the site valuable to society?		
S 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 = 0	0	
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? <i>At least one aquatic resource in the basin is on the 303(d) list.</i> Yes = 1 No = 0	0	
S 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? <i>Answer YES if there is a TMDL for the basin in which unit is found.</i> Yes = 2 No = 0	2	
Total for S 3		2

Rating of Value If score is: X 2-4 = H 1 = M 0 = L

Record the rating on the first page

Wetland name or number M

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: *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 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
 - Emergent 3 structures: points = 2
 - Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1
 - Forested (areas where trees have > 30% cover) 1 structure: points = 0
- If the unit has a Forested class, check if:*
- 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

0

H 1.2. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- Permanently flooded or inundated 4 or more types present: points = 3
- Seasonally flooded or inundated 3 types present: points = 2
- Occasionally flooded or inundated 2 types present: points = 1
- Saturated only 1 type present: points = 0
- Permanently flowing stream or river in, or adjacent to, the wetland
- Seasonally flowing stream in, or adjacent to, the wetland
- Lake Fringe wetland** **2 points**
- Freshwater tidal wetland** **2 points**

0

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft².

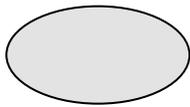
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

- If you counted: > 19 species points = 2
- 5 - 19 species points = 1
- < 5 species points = 0

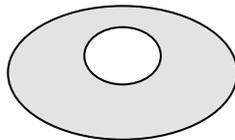
1

H 1.4. Interspersion of habitats

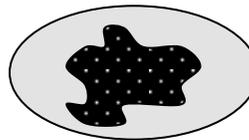
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



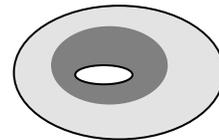
None = 0 points



Low = 1 point

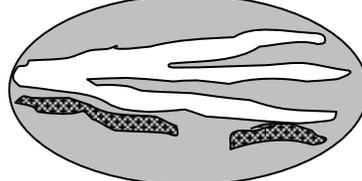
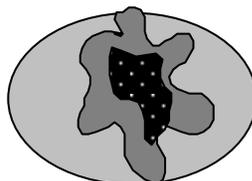
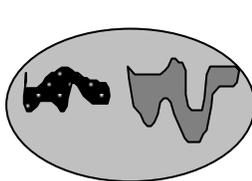


Moderate = 2 points



0

All three diagrams in this row are **HIGH** = 3points



Wetland name or number M

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input type="checkbox"/> 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)</p> <p><input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input checked="" type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>	1
<p>Total for H 1</p>	<p>Add the points in the boxes above</p> <p>2</p>

Rating of Site Potential If score is: 15-18 = H 7-14 = M X 0-6 = L *Record the rating on the first page*

<p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>	
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <u>20.67</u> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>	2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.2"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <u>51.72499999999999</u> %</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>	0
<p>Total for H 2</p>	<p>Add the points in the boxes above</p> <p>5</p>

Rating of Landscape Potential If score is: X 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

<p>H 3.0. Is the habitat provided by the site valuable to society?</p>	
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p><input checked="" type="checkbox"/> It has 3 or more priority habitats within 100 m (see next page)</p> <p><input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p><input type="checkbox"/> It is mapped as a location for an individual WDFW priority species</p> <p><input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p><input type="checkbox"/> 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</p> <p>Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>	2

Rating of Value If score is: X 2 = H 1 = M 0 = L *Record the rating on the first page*

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

Wetland name or number M

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt</p> <p style="text-align: right;"><input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25)</p> <p><input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland.</p> <p><input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4</p> <p>NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has 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 ¾ 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 1/10 ac (4350 ft²) <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Wetland name or number N

RATING SUMMARY – Western Washington

Name of wetland (or ID #): N Date of site visit: 10/31/23
 Rated by Rachael Hyland, Kramer Canup, Amanda Smith Trained by Ecology? Yes No Date of training 3/2019
 HGM Class used for rating Slope Wetland has multiple HGM classes? Y N

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

OVERALL WETLAND CATEGORY III (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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	M	L	L	
Landscape Potential	L	L	H	
Value	H	M	H	TOTAL
Score Based on Ratings	6	4	7	17

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number N

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number N

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number N

SLOPE WETLANDS

Water Quality Functions - Indicators that the site functions 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: <i>(a 1% slope has a 1 ft vertical drop in elevation for every 100 ft of horizontal distance)</i> Slope is 1% or less points = 3 Slope is > 1%-2% points = 2 Slope is > 2%-5% points = 1 Slope is greater than 5% points = 0	1	
S 1.2. <u>The soil 2 in below the surface (or duff layer)</u> is true clay or true organic (use NRCS definitions): Yes = 3 No = 0		3
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollutants: Choose the points appropriate for the description that best fits the plants in the wetland. <i>Dense means you have trouble seeing the soil surface (>75% cover), and uncut means not grazed or mowed and plants are higher than 6 in.</i> Dense, uncut, herbaceous plants > 90% of the wetland area points = 6 Dense, uncut, herbaceous plants > ½ of area points = 3 Dense, woody, plants > ½ of area points = 2 Dense, uncut, herbaceous plants > ¼ of area points = 1 Does not meet any of the criteria above for plants points = 0	3	
Total for S 1 Add the points in the boxes above		7

Rating of Site Potential If score is: 12 = H 6-11 = M 0-5 = L

Record the rating on the first page

S 2.0. Does the landscape have the potential to support the water quality function of the site?		
S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in land uses that generate pollutants? Yes = 1 No = 0	0	
S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other sources _____ Yes = 1 No = 0	0	
Total for S 2 Add the points in the boxes above		0

Rating of Landscape Potential If score is: 1-2 = M 0 = L

Record the rating on the first page

S 3.0. Is the water quality improvement provided by the site valuable to society?		
S 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 = 0	0	
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? <i>At least one aquatic resource in the basin is on the 303(d) list.</i> Yes = 1 No = 0	0	
S 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? <i>Answer YES if there is a TMDL for the basin in which unit is found.</i> Yes = 2 No = 0	2	
Total for S 3 Add the points in the boxes above		2

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

Record the rating on the first page

Wetland name or number N

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: *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 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
 - Emergent 3 structures: points = 2
 - Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1
 - Forested (areas where trees have > 30% cover) 1 structure: points = 0
- If the unit has a Forested class, check if:*
- 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

0

H 1.2. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- Permanently flooded or inundated 4 or more types present: points = 3
- Seasonally flooded or inundated 3 types present: points = 2
- Occasionally flooded or inundated 2 types present: points = 1
- Saturated only 1 type present: points = 0
- Permanently flowing stream or river in, or adjacent to, the wetland
- Seasonally flowing stream in, or adjacent to, the wetland
- Lake Fringe wetland** **2 points**
- Freshwater tidal wetland** **2 points**

0

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft².

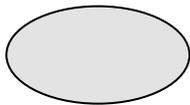
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

- If you counted: > 19 species points = 2
- 5 - 19 species points = 1
- < 5 species points = 0

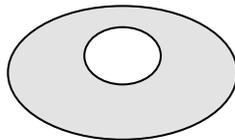
1

H 1.4. Interspersion of habitats

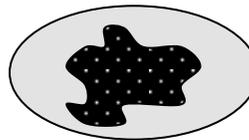
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



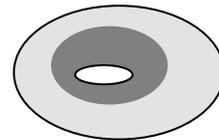
None = 0 points



Low = 1 point

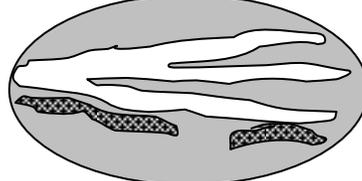
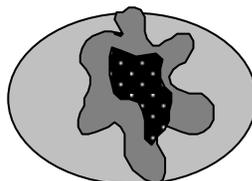
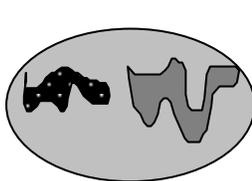


Moderate = 2 points



0

All three diagrams in this row are **HIGH** = 3points



Wetland name or number N

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input checked="" type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input type="checkbox"/> 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)</p> <p><input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input checked="" type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>		2
Total for H 1	Add the points in the boxes above	3

Rating of Site Potential If score is: 15-18 = H 7-14 = M X 0-6 = L *Record the rating on the first page*

H 2.0. Does the landscape have the potential to support the habitat functions of the site?		
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <input type="text" value="20.67"/> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>		2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.2"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <input type="text" value="51.72499999999999"/> %</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>		3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>		0
Total for H 2	Add the points in the boxes above	5

Rating of Landscape Potential If score is: X 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

H 3.0. Is the habitat provided by the site valuable to society?		
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p><input checked="" type="checkbox"/> It has 3 or more priority habitats within 100 m (see next page)</p> <p><input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p><input type="checkbox"/> It is mapped as a location for an individual WDFW priority species</p> <p><input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p><input type="checkbox"/> 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</p> <p>Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>		2

Rating of Value If score is: X 2 = H 1 = M 0 = L *Record the rating on the first page*

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

Wetland name or number N

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt</p> <p style="text-align: right;"><input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25)</p> <p><input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland.</p> <p><input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4</p> <p>NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

Wetland name or number N

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has 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 ¾ 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 1/10 ac (4350 ft²) <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Wetland name or number 0

RATING SUMMARY – Western Washington

Name of wetland (or ID #): 0 Date of site visit: 11/10/23
 Rated by Rachael Hyland, Amanda Smith Trained by Ecology? Yes No Date of training 3/2019
 HGM Class used for rating Slope Wetland has multiple HGM classes? Y N

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

OVERALL WETLAND CATEGORY III (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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	L	L	M	
Landscape Potential	L	L	H	
Value	H	M	H	TOTAL
Score Based on Ratings	5	4	8	17

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

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	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number O

SLOPE WETLANDS

Water Quality Functions - Indicators that the site functions 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: <i>(a 1% slope has a 1 ft vertical drop in elevation for every 100 ft of horizontal distance)</i>		
Slope is 1% or less	points = 3	0
Slope is > 1%-2%	points = 2	
Slope is > 2%-5%	points = 1	
Slope is greater than 5%	points = 0	
S 1.2. <u>The soil 2 in below the surface (or duff layer)</u> is true clay or true organic <i>(use NRCS definitions)</i> : Yes = 3 No = 0		3
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollutants: Choose the points appropriate for the description that best fits the plants in the wetland. <i>Dense means you have trouble seeing the soil surface (>75% cover), and uncut means not grazed or mowed and plants are higher than 6 in.</i>		
Dense, uncut, herbaceous plants > 90% of the wetland area	points = 6	2
Dense, uncut, herbaceous plants > ½ of area	points = 3	
Dense, woody, plants > ½ of area	points = 2	
Dense, uncut, herbaceous plants > ¼ of area	points = 1	
Does not meet any of the criteria above for plants	points = 0	
Total for S 1	Add the points in the boxes above	5

Rating of Site Potential If score is: 12 = H 6-11 = M X 0-5 = L

Record the rating on the first page

S 2.0. Does the landscape have the potential to support the water quality function of the site?		
S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in land uses that generate pollutants?	Yes = 1 No = 0	0
S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other sources _____	Yes = 1 No = 0	0
Total for S 2	Add the points in the boxes above	0

Rating of Landscape Potential If score is: 1-2 = M X 0 = L

Record the rating on the first page

S 3.0. Is the water quality improvement provided by the site valuable to society?		
S 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 = 0	0
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? <i>At least one aquatic resource in the basin is on the 303(d) list.</i>	Yes = 1 No = 0	0
S 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? <i>Answer YES if there is a TMDL for the basin in which unit is found.</i>	Yes = 2 No = 0	2
Total for S 3	Add the points in the boxes above	2

Rating of Value If score is: X 2-4 = H 1 = M 0 = L

Record the rating on the first page

Wetland name or number

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: *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 ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.*

- | | | |
|---|----------------------------------|---|
| <input type="checkbox"/> Aquatic bed | 4 structures or more: points = 4 | 1 |
| <input type="checkbox"/> Emergent | 3 structures: points = 2 | |
| <input checked="" type="checkbox"/> Scrub-shrub (areas where shrubs have > 30% cover) | 2 structures: points = 1 | |
| <input checked="" type="checkbox"/> Forested (areas where trees have > 30% cover) | 1 structure: points = 0 | |
| <i>If the unit has a Forested class, check if:</i> | | |
| <input type="checkbox"/> 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. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- | | | |
|--|-------------------------------------|---|
| <input type="checkbox"/> Permanently flooded or inundated | 4 or more types present: points = 3 | 1 |
| <input type="checkbox"/> Seasonally flooded or inundated | 3 types present: points = 2 | |
| <input checked="" type="checkbox"/> Occasionally flooded or inundated | 2 types present: points = 1 | |
| <input checked="" type="checkbox"/> Saturated only | 1 type present: points = 0 | |
| <input type="checkbox"/> Permanently flowing stream or river in, or adjacent to, the wetland | | |
| <input type="checkbox"/> Seasonally flowing stream in, or adjacent to, the wetland | | |
| <input type="checkbox"/> Lake Fringe wetland | 2 points | |
| <input type="checkbox"/> Freshwater tidal wetland | 2 points | |

H 1.3. Richness of plant species

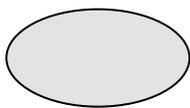
Count the number of plant species in the wetland that cover at least 10 ft².

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 milfoil, reed canarygrass, purple loosestrife, Canadian thistle

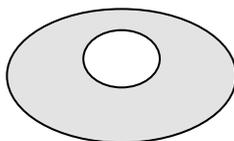
- | | | |
|------------------------------|------------|---|
| If you counted: > 19 species | points = 2 | 1 |
| 5 - 19 species | points = 1 | |
| < 5 species | points = 0 | |

H 1.4. Interspersion of habitats

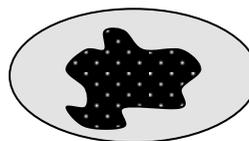
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



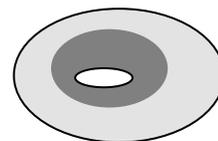
None = 0 points



Low = 1 point

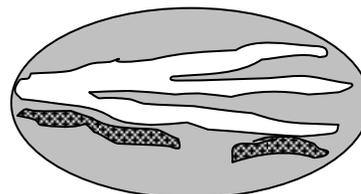
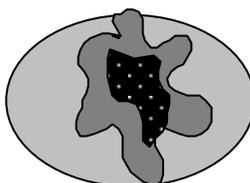
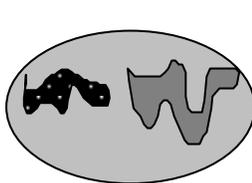


Moderate = 2 points



1

All three diagrams in this row are **HIGH** = 3points



Wetland name or number O

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input checked="" type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input checked="" type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input type="checkbox"/> 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)</p> <p><input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input checked="" type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>		3
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 0-6 = L *Record the rating on the first page*

<p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>		
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <input type="text" value="20.67"/> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>		2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.2"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <input type="text" value="51.72499999999999"/> %</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>		3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>		0
Total for H 2	Add the points in the boxes above	5

Rating of Landscape Potential If score is: 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

<p>H 3.0. Is the habitat provided by the site valuable to society?</p>		
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p><input checked="" type="checkbox"/> It has 3 or more priority habitats within 100 m (see next page)</p> <p><input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p><input type="checkbox"/> It is mapped as a location for an individual WDFW priority species</p> <p><input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p><input type="checkbox"/> 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</p> <p>Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>		2

Rating of Value If score is: 2 = H 1 = M 0 = L *Record the rating on the first page*

Wetland name or number O

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

Wetland name or number 0

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt <input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25) <input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland. <input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? <input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf <input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4 NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

Wetland name or number P

RATING SUMMARY – Western Washington

Name of wetland (or ID #): P Date of site visit: 11/10/2023
 Rated by Rachael Hyland, Amanda Smith Trained by Ecology? Yes No Date of training 3/2019
 HGM Class used for rating Depressional Wetland has multiple HGM classes? Y N

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

OVERALL WETLAND CATEGORY III (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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	M	L	M	
Landscape Potential	M	L	H	
Value	H	M	H	TOTAL
Score Based on Ratings	7	4	8	19

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number P

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number P

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number P

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?	
D 1.1. <u>Characteristics of surface water outflows from the wetland:</u> Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. 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.	points = 3 points = 2 points = 1 points = 1
D 1.2. <u>The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions).</u> Yes = 4 No = 0	0
D 1.3. <u>Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes):</u> Wetland 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	points = 5 points = 3 points = 1 points = 0
D 1.4. <u>Characteristics of seasonal ponding or inundation:</u> <i>This is the area that is ponded for at least 2 months. See description in manual.</i> Area seasonally ponded is > 1/2 total area of wetland Area seasonally ponded is > 1/4 total area of wetland Area seasonally ponded is < 1/4 total area of wetland	points = 4 points = 2 points = 0
Total for D 1	6 Add the points in the boxes above

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?	
D 2.1. Does the wetland unit receive stormwater discharges?	Yes = 1 No = 0
D 2.2. Is > 10% of the area within 150 ft of the wetland 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
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 <u>homeless camp</u>	Yes = 1 No = 0
Total for D 2	1 Add the points in the boxes above

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 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 = 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
D 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 basin in which the unit is found)?	Yes = 2 No = 0
Total for D 3	2 Add the points in the boxes above

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

NOTES and FIELD OBSERVATIONS:

Wetland name or number P

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. Characteristics of surface water outflows from the wetland:		
Wetland is a depression or flat depression with no surface water leaving it (no outlet)	points = 4	0
Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet	points = 2	
Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch	points = 1	
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	
D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part.		
Marks of ponding are 3 ft or more above the surface or bottom of outlet	points = 7	3
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 "headwater" wetland	points = 3	
Wetland is flat but has small depressions on the surface that trap water	points = 1	
Marks of ponding less than 0.5 ft (6 in)	points = 0	
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 less than 10 times the area of the unit	points = 5	0
The area of the basin is 10 to 100 times the area of the unit	points = 3	
The area of the basin is more than 100 times the area of the unit	points = 0	
Entire wetland is in the Flats class	points = 5	
Total for D 4	Add the points in the boxes above	3

Rating of Site Potential If score is: 12-16 = H 6-11 = M X 0-5 = L Record the rating on the 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?	Yes = 1 No = 0	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
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)?	Yes = 1 No = 0	0
Total for D 5	Add the points in the boxes above	0

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

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 around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met.		
The wetland 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):		1
• Flooding occurs in a sub-basin that is immediately down-gradient of unit.	points = 2	
• Surface flooding problems are in a sub-basin farther down-gradient.	points = 1	
Flooding from groundwater is an issue in the sub-basin.	points = 1	
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 _____	points = 0	
There are no problems with flooding downstream of the wetland. _____	points = 0	
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 = 0	0
Total for D 6	Add the points in the boxes above	1

Rating of Value If score is: 2-4 = H X 1 = M 0 = L Record the rating on the first page

Wetland name or number P

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: *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 ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.*

- | | | |
|---|----------------------------------|---|
| <input type="checkbox"/> Aquatic bed | 4 structures or more: points = 4 | 1 |
| <input type="checkbox"/> Emergent | 3 structures: points = 2 | |
| <input checked="" type="checkbox"/> Scrub-shrub (areas where shrubs have > 30% cover) | 2 structures: points = 1 | |
| <input checked="" type="checkbox"/> Forested (areas where trees have > 30% cover) | 1 structure: points = 0 | |
| <i>If the unit has a Forested class, check if:</i> | | |
| <input type="checkbox"/> 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. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- | | | |
|---|-------------------------------------|---|
| <input type="checkbox"/> Permanently flooded or inundated | 4 or more types present: points = 3 | 2 |
| <input checked="" type="checkbox"/> Seasonally flooded or inundated | 3 types present: points = 2 | |
| <input checked="" type="checkbox"/> Occasionally flooded or inundated | 2 types present: points = 1 | |
| <input type="checkbox"/> Saturated only | 1 type present: points = 0 | |
| <input checked="" type="checkbox"/> Permanently flowing stream or river in, or adjacent to, the wetland | | |
| <input type="checkbox"/> Seasonally flowing stream in, or adjacent to, the wetland | | |
| <input type="checkbox"/> Lake Fringe wetland | 2 points | |
| <input type="checkbox"/> Freshwater tidal wetland | 2 points | |

H 1.3. Richness of plant species

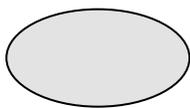
Count the number of plant species in the wetland that cover at least 10 ft².

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 milfoil, reed canarygrass, purple loosestrife, Canadian thistle

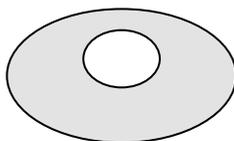
- | | | |
|------------------------------|------------|---|
| If you counted: > 19 species | points = 2 | 1 |
| 5 - 19 species | points = 1 | |
| < 5 species | points = 0 | |

H 1.4. Interspersion of habitats

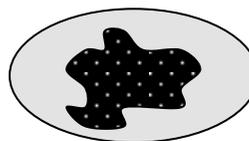
Decide from the diagrams below whether interspersions among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



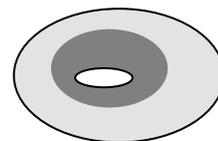
None = 0 points



Low = 1 point

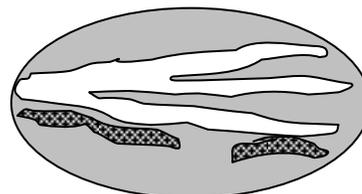
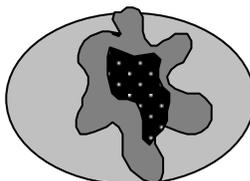
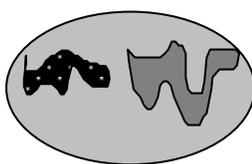


Moderate = 2 points



1

All three diagrams in this row are **HIGH** = 3points



Wetland name or number P

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input checked="" type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input checked="" type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input checked="" type="checkbox"/> 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)</p> <p><input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>	3
<p>Total for H 1</p>	<p>Add the points in the boxes above</p> <p>8</p>

Rating of Site Potential If score is: 15-18 = H 7-14 = M 0-6 = L *Record the rating on the first page*

<p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>	
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <input type="text" value="20.67"/> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>	2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.2"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <input type="text" value="51.72499999999999"/> %</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>	0
<p>Total for H 2</p>	<p>Add the points in the boxes above</p> <p>5</p>

Rating of Landscape Potential If score is: 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

<p>H 3.0. Is the habitat provided by the site valuable to society?</p>	
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p><input checked="" type="checkbox"/> It has 3 or more priority habitats within 100 m (see next page)</p> <p><input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p><input type="checkbox"/> It is mapped as a location for an individual WDFW priority species</p> <p><input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p><input type="checkbox"/> 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</p> <p>Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>	2

Rating of Value If score is: 2 = H 1 = M 0 = L *Record the rating on the first page*

Wetland name or number P

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

Wetland name or number P

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt <input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25) <input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. <input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? <input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf <input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4 NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

Wetland name or number P

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has 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 ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. — The wetland is larger than 1/10 ac (4350 ft²) <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Wetland name or number Q

RATING SUMMARY – Western Washington

Name of wetland (or ID #): Q Date of site visit: 11/14/2023
 Rated by Rachael Hyland, Amanda Smith Trained by Ecology? Yes No Date of training 3/2019
 HGM Class used for rating Depressional Wetland has multiple HGM classes? Y N

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

OVERALL WETLAND CATEGORY III (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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	M	L	L	
Landscape Potential	L	L	H	
Value	H	M	H	TOTAL
Score Based on Ratings	6	4	7	17

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number Q

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number Q

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number Q

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?		
D 1.1. <u>Characteristics of surface water outflows from the wetland:</u> Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. 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.	points = 3 points = 2 points = 1 points = 1	2
D 1.2. <u>The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions).</u> Yes = 4 No = 0		0
D 1.3. <u>Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes):</u> Wetland has persistent, ungrazed, plants > 95% of area Wetland has persistent, ungrazed, plants > ½ of area Wetland has persistent, ungrazed plants > 1/10 of area Wetland has persistent, ungrazed plants < 1/10 of area	points = 5 points = 3 points = 1 points = 0	5
D 1.4. <u>Characteristics of seasonal ponding or inundation:</u> <i>This is the area that is ponded for at least 2 months. See description in manual.</i> Area seasonally ponded is > ½ total area of wetland Area seasonally ponded is > ¼ total area of wetland Area seasonally ponded is < ¼ total area of wetland	points = 4 points = 2 points = 0	0
Total for D 1		7

Rating of Site Potential If score is: 12-16 = H X 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?		
D 2.1. Does the wetland unit receive stormwater discharges?	Yes = 1 No = 0	0
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants?	Yes = 1 No = 0	0
D 2.3. Are there septic systems within 250 ft of the wetland?	Yes = 1 No = 0	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 _____	Yes = 1 No = 0	0
Total for D 2		0

Rating of Landscape Potential If score is: 3 or 4 = H 1 or 2 = M X 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 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 = 0	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
D 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 basin in which the unit is found)?	Yes = 2 No = 0	2
Total for D 3		2

Rating of Value If score is: X 2-4 = H 1 = M 0 = L Record the rating on the first page

NOTES and FIELD OBSERVATIONS:

Wetland name or number Q

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. Characteristics of surface water outflows from the wetland:		
Wetland is a depression or flat depression with no surface water leaving it (no outlet)	points = 4	2
Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet	points = 2	
Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch	points = 1	
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	
D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part.		
Marks of ponding are 3 ft or more above the surface or bottom of outlet	points = 7	0
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 "headwater" wetland	points = 3	
Wetland is flat but has small depressions on the surface that trap water	points = 1	
Marks of ponding less than 0.5 ft (6 in)	points = 0	
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 less than 10 times the area of the unit	points = 5	0
The area of the basin is 10 to 100 times the area of the unit	points = 3	
The area of the basin is more than 100 times the area of the unit	points = 0	
Entire wetland is in the Flats class	points = 5	
Total for D 4	Add the points in the boxes above	2

Rating of Site Potential If score is: 12-16 = H 6-11 = M X 0-5 = L Record the rating on the 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?	Yes = 1 No = 0	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
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)?	Yes = 1 No = 0	0
Total for D 5	Add the points in the boxes above	0

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

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 around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met.		
The wetland 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):		1
• Flooding occurs in a sub-basin that is immediately down-gradient of unit.	points = 2	
• Surface flooding problems are in a sub-basin farther down-gradient.	points = 1	
Flooding from groundwater is an issue in the sub-basin.	points = 1	
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 _____	points = 0	
There are no problems with flooding downstream of the wetland. _____	points = 0	
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 = 0	0
Total for D 6	Add the points in the boxes above	1

Rating of Value If score is: 2-4 = H X 1 = M 0 = L Record the rating on the first page

Wetland name or number Q

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: *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 ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.*

- | | | |
|---|----------------------------------|---|
| <input type="checkbox"/> Aquatic bed | 4 structures or more: points = 4 | 2 |
| <input checked="" type="checkbox"/> Emergent | 3 structures: points = 2 | |
| <input checked="" type="checkbox"/> Scrub-shrub (areas where shrubs have > 30% cover) | 2 structures: points = 1 | |
| <input checked="" type="checkbox"/> Forested (areas where trees have > 30% cover) | 1 structure: points = 0 | |
| <i>If the unit has a Forested class, check if:</i> | | |
| <input type="checkbox"/> 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. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- | | | |
|--|-------------------------------------|---|
| <input type="checkbox"/> Permanently flooded or inundated | 4 or more types present: points = 3 | 1 |
| <input type="checkbox"/> Seasonally flooded or inundated | 3 types present: points = 2 | |
| <input checked="" type="checkbox"/> Occasionally flooded or inundated | 2 types present: points = 1 | |
| <input checked="" type="checkbox"/> Saturated only | 1 type present: points = 0 | |
| <input type="checkbox"/> Permanently flowing stream or river in, or adjacent to, the wetland | | |
| <input type="checkbox"/> Seasonally flowing stream in, or adjacent to, the wetland | | |
| <input type="checkbox"/> Lake Fringe wetland | 2 points | |
| <input type="checkbox"/> Freshwater tidal wetland | 2 points | |

H 1.3. Richness of plant species

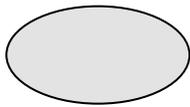
Count the number of plant species in the wetland that cover at least 10 ft².

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 milfoil, reed canarygrass, purple loosestrife, Canadian thistle

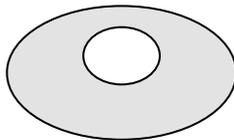
- | | | |
|------------------------------|------------|---|
| If you counted: > 19 species | points = 2 | 1 |
| 5 - 19 species | points = 1 | |
| < 5 species | points = 0 | |

H 1.4. Interspersion of habitats

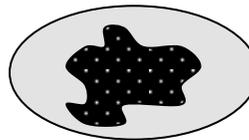
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



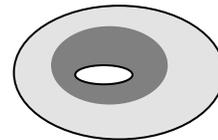
None = 0 points



Low = 1 point

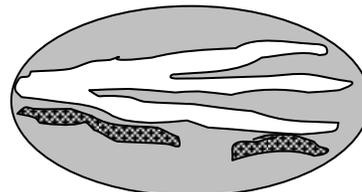
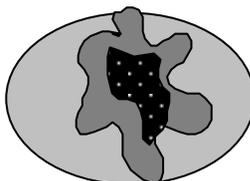
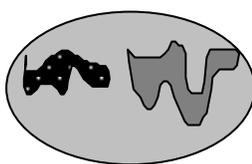


Moderate = 2 points



2

All three diagrams in this row are **HIGH** = 3points



Wetland name or number Q

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input type="checkbox"/> 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)</p> <p><input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>	0
<p>Total for H 1</p>	<p>Add the points in the boxes above</p> <p>6</p>

Rating of Site Potential If score is: 15-18 = H 7-14 = M X 0-6 = L *Record the rating on the first page*

<p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>	
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <u>20.67</u> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>	2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.2"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <u>51.72499999999999</u> %</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>	0
<p>Total for H 2</p>	<p>Add the points in the boxes above</p> <p>5</p>

Rating of Landscape Potential If score is: X 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

<p>H 3.0. Is the habitat provided by the site valuable to society?</p>	
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p><u> X </u> It has 3 or more priority habitats within 100 m (see next page)</p> <p><u> </u> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p><u> </u> It is mapped as a location for an individual WDFW priority species</p> <p><u> </u> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p><u> </u> 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</p> <p>Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>	2

Rating of Value If score is: X 2 = H 1 = M 0 = L *Record the rating on the first page*

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

Wetland name or number Q

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt <input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25) <input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. <input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? <input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf <input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4 NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

Wetland name or number Q

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has 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 ¾ 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 1/10 ac (4350 ft²) <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Wetland name or number R

RATING SUMMARY – Western Washington

Name of wetland (or ID #): R Date of site visit: 11/15/23
 Rated by Rachael Hyland, Amanda Smith Trained by Ecology? Yes No Date of training 3/2019
 HGM Class used for rating Slope Wetland has multiple HGM classes? Y N

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

OVERALL WETLAND CATEGORY III (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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	L	L	L	
Landscape Potential	M	L	H	
Value	H	M	H	TOTAL
Score Based on Ratings	6	4	7	17

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number R

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number R

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number R

SLOPE WETLANDS

Water Quality Functions - Indicators that the site functions 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: <i>(a 1% slope has a 1 ft vertical drop in elevation for every 100 ft of horizontal distance)</i> Slope is 1% or less points = 3 Slope is > 1%-2% points = 2 Slope is > 2%-5% points = 1 Slope is greater than 5% points = 0	0	
S 1.2. <u>The soil 2 in below the surface (or duff layer)</u> is true clay or true organic <i>(use NRCS definitions)</i> : Yes = 3 No = 0		3
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollutants: Choose the points appropriate for the description that best fits the plants in the wetland. <i>Dense means you have trouble seeing the soil surface (>75% cover), and uncut means not grazed or mowed and plants are higher than 6 in.</i> Dense, uncut, herbaceous plants > 90% of the wetland area points = 6 Dense, uncut, herbaceous plants > ½ of area points = 3 Dense, woody, plants > ½ of area points = 2 Dense, uncut, herbaceous plants > ¼ of area points = 1 Does not meet any of the criteria above for plants points = 0	2	
Total for S 1 Add the points in the boxes above		5

Rating of Site Potential If score is: 12 = H 6-11 = M X 0-5 = L

Record the rating on the first page

S 2.0. Does the landscape have the potential to support the water quality function of the site?		
S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in land uses that generate pollutants? Yes = 1 No = 0	1	
S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other sources _____ Yes = 1 No = 0	0	
Total for S 2 Add the points in the boxes above		1

Rating of Landscape Potential If score is: X 1-2 = M 0 = L

Record the rating on the first page

S 3.0. Is the water quality improvement provided by the site valuable to society?		
S 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 = 0	0	
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? <i>At least one aquatic resource in the basin is on the 303(d) list.</i> Yes = 1 No = 0	0	
S 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? <i>Answer YES if there is a TMDL for the basin in which unit is found.</i> Yes = 2 No = 0	2	
Total for S 3 Add the points in the boxes above		2

Rating of Value If score is: X 2-4 = H 1 = M 0 = L

Record the rating on the first page

Wetland name or number R

SLOPE WETLANDS

Hydrologic Functions - Indicators that the site functions to reduce flooding and stream erosion

S 4.0. Does the site have the potential to reduce flooding and stream erosion?

S 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. <i>Stems of plants should be thick enough (usually > 1/8 in), or dense enough, to remain erect during surface flows.</i>	0
Dense, uncut, rigid plants cover > 90% of the area of the wetland	
All other conditions	

points = 1
points = 0

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

Record the rating on the first page

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

S 5.1. Is more than 25% of the area within 150 ft upslope of wetland in land uses or cover that generate excess surface runoff?	0
---	---

Yes = 1 No = 0

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

Record the rating on the first page

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 redds)	1
Surface flooding problems are in a sub-basin farther down-gradient	
No flooding problems anywhere downstream	

points = 2
points = 1
points = 0

S 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan?	0
--	---

Yes = 2 No = 0

Total for S 6	1
---------------	---

Add the points in the boxes above

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

Record the rating on the first page

NOTES and FIELD OBSERVATIONS:

Wetland name or number R

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: *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 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
 - Emergent 3 structures: points = 2
 - Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1
 - Forested (areas where trees have > 30% cover) 1 structure: points = 0
- If the unit has a Forested class, check if:*
- 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

0

H 1.2. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- Permanently flooded or inundated 4 or more types present: points = 3
- Seasonally flooded or inundated 3 types present: points = 2
- Occasionally flooded or inundated 2 types present: points = 1
- Saturated only 1 type present: points = 0
- Permanently flowing stream or river in, or adjacent to, the wetland
- Seasonally flowing stream in, or adjacent to, the wetland
- Lake Fringe wetland** **2 points**
- Freshwater tidal wetland** **2 points**

1

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft².

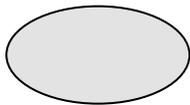
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

- If you counted: > 19 species points = 2
- 5 - 19 species points = 1
- < 5 species points = 0

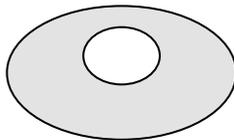
1

H 1.4. Interspersion of habitats

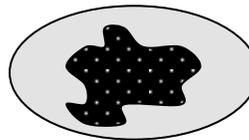
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



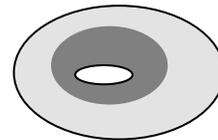
None = 0 points



Low = 1 point

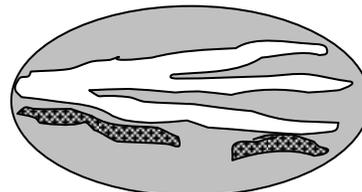
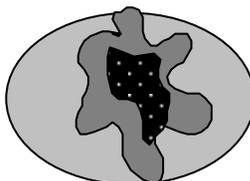
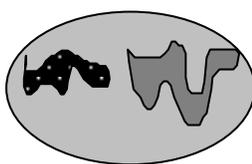


Moderate = 2 points



0

All three diagrams in this row are **HIGH** = 3points



Wetland name or number R

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input checked="" type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input checked="" type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input checked="" type="checkbox"/> 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)</p> <p><input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input checked="" type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>	4
<p>Total for H 1</p>	<p>Add the points in the boxes above</p> <p>6</p>

Rating of Site Potential If score is: 15-18 = H 7-14 = M 0-6 = L *Record the rating on the first page*

<p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>	
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <input type="text" value="20.67"/> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>	2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.2"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <input type="text" value="51.72499999999999"/> %</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>	0
<p>Total for H 2</p>	<p>Add the points in the boxes above</p> <p>5</p>

Rating of Landscape Potential If score is: 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

<p>H 3.0. Is the habitat provided by the site valuable to society?</p>	
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p><input checked="" type="checkbox"/> It has 3 or more priority habitats within 100 m (see next page)</p> <p><input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p><input type="checkbox"/> It is mapped as a location for an individual WDFW priority species</p> <p><input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p><input type="checkbox"/> 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</p> <p>Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>	2

Rating of Value If score is: 2 = H 1 = M 0 = L *Record the rating on the first page*

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

Wetland name or number R

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt <input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25) <input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. <input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? <input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwtlands.pdf <input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4 NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

Wetland name or number R

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has 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 ¾ 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 1/10 ac (4350 ft²) <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Wetland name or number S

RATING SUMMARY – Western Washington

Name of wetland (or ID #): S Date of site visit: 11/15/23
 Rated by Rachael Hyland, Amanda Smith Trained by Ecology? Yes No Date of training 3/2019
 HGM Class used for rating Slope Wetland has multiple HGM classes? Y N

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

OVERALL WETLAND CATEGORY III (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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	L	L	M	
Landscape Potential	M	M	H	
Value	H	M	H	TOTAL
Score Based on Ratings	6	5	8	19

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number S

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number S

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number S

SLOPE WETLANDS

Water Quality Functions - Indicators that the site functions 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: <i>(a 1% slope has a 1 ft vertical drop in elevation for every 100 ft of horizontal distance)</i> Slope is 1% or less points = 3 Slope is > 1%-2% points = 2 Slope is > 2%-5% points = 1 Slope is greater than 5% points = 0	0	
S 1.2. <u>The soil 2 in below the surface (or duff layer)</u> is true clay or true organic <i>(use NRCS definitions)</i> : Yes = 3 No = 0		3
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollutants: Choose the points appropriate for the description that best fits the plants in the wetland. <i>Dense means you have trouble seeing the soil surface (>75% cover), and uncut means not grazed or mowed and plants are higher than 6 in.</i> Dense, uncut, herbaceous plants > 90% of the wetland area points = 6 Dense, uncut, herbaceous plants > ½ of area points = 3 Dense, woody, plants > ½ of area points = 2 Dense, uncut, herbaceous plants > ¼ of area points = 1 Does not meet any of the criteria above for plants points = 0	2	
Total for S 1 Add the points in the boxes above		5

Rating of Site Potential If score is: 12 = H 6-11 = M X 0-5 = L

Record the rating on the first page

S 2.0. Does the landscape have the potential to support the water quality function of the site?		
S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in land uses that generate pollutants? Yes = 1 No = 0	1	
S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other sources _____ Yes = 1 No = 0	0	
Total for S 2 Add the points in the boxes above		1

Rating of Landscape Potential If score is: X 1-2 = M 0 = L

Record the rating on the first page

S 3.0. Is the water quality improvement provided by the site valuable to society?		
S 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 = 0	0	
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? <i>At least one aquatic resource in the basin is on the 303(d) list.</i> Yes = 1 No = 0	0	
S 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? <i>Answer YES if there is a TMDL for the basin in which unit is found.</i> Yes = 2 No = 0	2	
Total for S 3 Add the points in the boxes above		2

Rating of Value If score is: X 2-4 = H 1 = M 0 = L

Record the rating on the first page

Wetland name or number S

SLOPE WETLANDS

Hydrologic Functions - Indicators that the site functions to reduce flooding and stream erosion

S 4.0. Does the site have the potential to reduce flooding and stream erosion?

S 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. <i>Stems of plants should be thick enough (usually > 1/8 in), or dense enough, to remain erect during surface flows.</i> Dense, uncut, rigid plants cover > 90% of the area of the wetland All other conditions	points = 1 points = 0	0
---	--------------------------	---

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

Record the rating on the first page

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

S 5.1. Is more than 25% of the area within 150 ft upslope of wetland in land uses or cover that generate excess surface runoff?	Yes = 1 No = 0	1
---	----------------	---

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

Record the rating on the first page

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 redds) Surface flooding problems are in a sub-basin farther down-gradient No flooding problems anywhere downstream	points = 2 points = 1 points = 0	1
--	--	---

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	0
--	----------------	---

Total for S 6	Add the points in the boxes above	1
---------------	-----------------------------------	---

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

Record the rating on the first page

NOTES and FIELD OBSERVATIONS:

Wetland name or number S

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: *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 ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.*

- | | | |
|---|----------------------------------|---|
| <input type="checkbox"/> Aquatic bed | 4 structures or more: points = 4 | 1 |
| <input type="checkbox"/> Emergent | 3 structures: points = 2 | |
| <input checked="" type="checkbox"/> Scrub-shrub (areas where shrubs have > 30% cover) | 2 structures: points = 1 | |
| <input checked="" type="checkbox"/> Forested (areas where trees have > 30% cover) | 1 structure: points = 0 | |
| <i>If the unit has a Forested class, check if:</i> | | |
| <input type="checkbox"/> 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. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- | | | |
|--|-------------------------------------|---|
| <input type="checkbox"/> Permanently flooded or inundated | 4 or more types present: points = 3 | 0 |
| <input type="checkbox"/> Seasonally flooded or inundated | 3 types present: points = 2 | |
| <input type="checkbox"/> Occasionally flooded or inundated | 2 types present: points = 1 | |
| <input checked="" type="checkbox"/> Saturated only | 1 type present: points = 0 | |
| <input type="checkbox"/> Permanently flowing stream or river in, or adjacent to, the wetland | | |
| <input type="checkbox"/> Seasonally flowing stream in, or adjacent to, the wetland | | |
| <input type="checkbox"/> Lake Fringe wetland | 2 points | |
| <input type="checkbox"/> Freshwater tidal wetland | 2 points | |

H 1.3. Richness of plant species

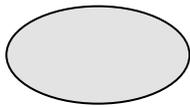
Count the number of plant species in the wetland that cover at least 10 ft².

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 milfoil, reed canarygrass, purple loosestrife, Canadian thistle

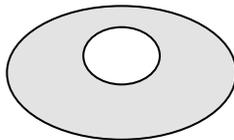
- | | | |
|------------------------------|------------|---|
| If you counted: > 19 species | points = 2 | 1 |
| 5 - 19 species | points = 1 | |
| < 5 species | points = 0 | |

H 1.4. Interspersion of habitats

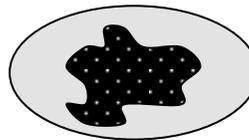
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



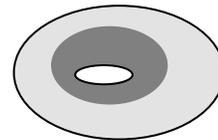
None = 0 points



Low = 1 point

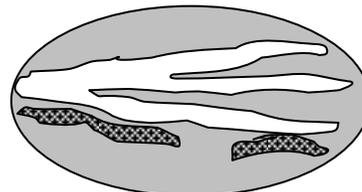
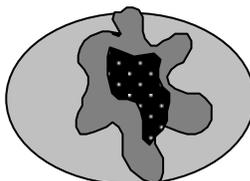
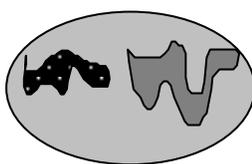


Moderate = 2 points



1

All three diagrams in this row are **HIGH** = 3points



Wetland name or number S

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input checked="" type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input checked="" type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input checked="" type="checkbox"/> 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)</p> <p><input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input checked="" type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>	4
<p>Total for H 1</p>	<p>Add the points in the boxes above</p> <p>7</p>

Rating of Site Potential If score is: 15-18 = H 7-14 = M 0-6 = L *Record the rating on the first page*

<p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>	
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <input type="text" value="20.67"/> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>	2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.2"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <input type="text" value="51.72499999999999"/> %</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>	0
<p>Total for H 2</p>	<p>Add the points in the boxes above</p> <p>5</p>

Rating of Landscape Potential If score is: 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

<p>H 3.0. Is the habitat provided by the site valuable to society?</p>	
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p><input checked="" type="checkbox"/> It has 3 or more priority habitats within 100 m (see next page)</p> <p><input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p><input type="checkbox"/> It is mapped as a location for an individual WDFW priority species</p> <p><input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p><input type="checkbox"/> 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</p> <p>Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>	2

Rating of Value If score is: 2 = H 1 = M 0 = L *Record the rating on the first page*

Wetland name or number S

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

Wetland name or number S

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt <input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25) <input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland. <input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? <input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf <input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4 NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

Wetland name or number S

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none">— Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none">— The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none">— The wetland is relatively undisturbed (has 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 ¾ 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 1/10 ac (4350 ft²) <p><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none">— Long Beach Peninsula: Lands west of SR 103— Grayland-Westport: Lands west of SR 105— Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Wetland name or number T

RATING SUMMARY – Western Washington

Name of wetland (or ID #): T Date of site visit: 11/16/2023
 Rated by Casey Lanier, Garret Jordan Trained by Ecology? Yes No Date of training 12/2021
 HGM Class used for rating Depressional Wetland has multiple HGM classes? Y N

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

OVERALL WETLAND CATEGORY III (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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	M	L	L	
Landscape Potential	H	M	H	
Value	H	M	M	TOTAL
Score Based on Ratings	8	5	6	19

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number T

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number T

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number T

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?	
D 1.1. <u>Characteristics of surface water outflows from the wetland:</u> Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. 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.	points = 3 points = 2 points = 1 points = 1
D 1.2. <u>The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions).</u> Yes = 4 No = 0	0
D 1.3. <u>Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes):</u> Wetland has persistent, ungrazed, plants > 95% of area Wetland has persistent, ungrazed, plants > ½ of area Wetland has persistent, ungrazed plants > 1/10 of area Wetland has persistent, ungrazed plants < 1/10 of area	points = 5 points = 3 points = 1 points = 0
D 1.4. <u>Characteristics of seasonal ponding or inundation:</u> <i>This is the area that is ponded for at least 2 months. See description in manual.</i> Area seasonally ponded is > ½ total area of wetland Area seasonally ponded is > ¼ total area of wetland Area seasonally ponded is < ¼ total area of wetland	points = 4 points = 2 points = 0
Total for D 1	Add the points in the boxes above 6

Rating of Site Potential If score is: 12-16 = H X 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?	
D 2.1. Does the wetland unit receive stormwater discharges?	Yes = 1 No = 0 1
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants?	Yes = 1 No = 0 1
D 2.3. Are there septic systems within 250 ft of the wetland?	Yes = 1 No = 0 1
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 _____	Yes = 1 No = 0 0
Total for D 2	Add the points in the boxes above 3

Rating of Landscape Potential If score is: X 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 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 = 0 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
D 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 basin in which the unit is found)?	Yes = 2 No = 0 2
Total for D 3	Add the points in the boxes above 2

Rating of Value If score is: X 2-4 = H 1 = M 0 = L Record the rating on the first page

NOTES and FIELD OBSERVATIONS:

Wetland name or number T

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. Characteristics of surface water outflows from the wetland:		
Wetland is a depression or flat depression with no surface water leaving it (no outlet)	points = 4	0
Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet	points = 2	
Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch	points = 1	
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	
D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part.		
Marks of ponding are 3 ft or more above the surface or bottom of outlet	points = 7	3
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 "headwater" wetland	points = 3	
Wetland is flat but has small depressions on the surface that trap water	points = 1	
Marks of ponding less than 0.5 ft (6 in)	points = 0	
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 less than 10 times the area of the unit	points = 5	0
The area of the basin is 10 to 100 times the area of the unit	points = 3	
The area of the basin is more than 100 times the area of the unit	points = 0	
Entire wetland is in the Flats class	points = 5	
Total for D 4	Add the points in the boxes above	3

Rating of Site Potential If score is: 12-16 = H 6-11 = M X 0-5 = L Record the rating on the 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?	Yes = 1 No = 0	1
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	1
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)?	Yes = 1 No = 0	0
Total for D 5	Add the points in the boxes above	2

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

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 around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met.		
The wetland 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):		1
• Flooding occurs in a sub-basin that is immediately down-gradient of unit.	points = 2	
• Surface flooding problems are in a sub-basin farther down-gradient.	points = 1	
Flooding from groundwater is an issue in the sub-basin.	points = 1	
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 _____	points = 0	
There are no problems with flooding downstream of the wetland.	points = 0	
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 = 0	0
Total for D 6	Add the points in the boxes above	1

Rating of Value If score is: 2-4 = H X 1 = M 0 = L Record the rating on the first page

Wetland name or number

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: *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 ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.*

- | | | |
|---|----------------------------------|---|
| <input type="checkbox"/> Aquatic bed | 4 structures or more: points = 4 | 1 |
| <input type="checkbox"/> Emergent | 3 structures: points = 2 | |
| <input checked="" type="checkbox"/> Scrub-shrub (areas where shrubs have > 30% cover) | 2 structures: points = 1 | |
| <input checked="" type="checkbox"/> Forested (areas where trees have > 30% cover) | 1 structure: points = 0 | |
| <i>If the unit has a Forested class, check if:</i> | | |
| <input type="checkbox"/> 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. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- | | | |
|--|-------------------------------------|---|
| <input type="checkbox"/> Permanently flooded or inundated | 4 or more types present: points = 3 | 1 |
| <input checked="" type="checkbox"/> Seasonally flooded or inundated | 3 types present: points = 2 | |
| <input type="checkbox"/> Occasionally flooded or inundated | 2 types present: points = 1 | |
| <input checked="" type="checkbox"/> Saturated only | 1 type present: points = 0 | |
| <input type="checkbox"/> Permanently flowing stream or river in, or adjacent to, the wetland | | |
| <input type="checkbox"/> Seasonally flowing stream in, or adjacent to, the wetland | | |
| <input type="checkbox"/> Lake Fringe wetland | 2 points | |
| <input type="checkbox"/> Freshwater tidal wetland | 2 points | |

H 1.3. Richness of plant species

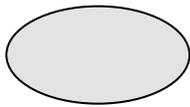
Count the number of plant species in the wetland that cover at least 10 ft².

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 milfoil, reed canarygrass, purple loosestrife, Canadian thistle

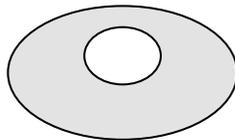
- | | | |
|------------------------------|------------|---|
| If you counted: > 19 species | points = 2 | 1 |
| 5 - 19 species | points = 1 | |
| < 5 species | points = 0 | |

H 1.4. Interspersion of habitats

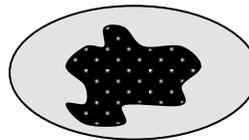
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



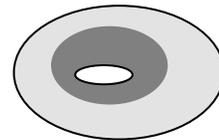
None = 0 points



Low = 1 point

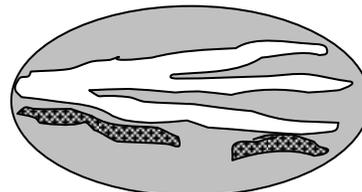
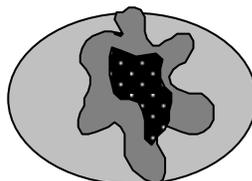
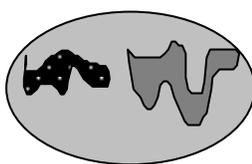


Moderate = 2 points



1

All three diagrams in this row are **HIGH** = 3points



Wetland name or number T

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input checked="" type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input type="checkbox"/> 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)</p> <p><input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input checked="" type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>	2
<p>Total for H 1</p>	6

Add the points in the boxes above

Rating of Site Potential If score is: 15-18 = H 7-14 = M X 0-6 = L

Record the rating on the first page

<p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>	
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <input type="text" value="20.67"/> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>	2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.2"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <input type="text" value="51.72499999999999"/> %</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>	0
<p>Total for H 2</p>	5

Add the points in the boxes above

Rating of Landscape Potential If score is: X 4-6 = H 1-3 = M < 1 = L

Record the rating on the first page

<p>H 3.0. Is the habitat provided by the site valuable to society?</p>	
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p>— It has 3 or more priority habitats within 100 m (see next page)</p> <p>— It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p>— It is mapped as a location for an individual WDFW priority species</p> <p>— It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p>— 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</p> <p><input checked="" type="checkbox"/> Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>	1

Rating of Value If score is: 2 = H X 1 = M 0 = L

Record the rating on the first page

Wetland name or number T

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

Wetland name or number T

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt <input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25) <input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland. <input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? <input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf <input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4 NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

Wetland name or number T

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has 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 ¾ 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 1/10 ac (4350 ft²) <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Wetland name or number U

RATING SUMMARY – Western Washington

Name of wetland (or ID #): U Date of site visit: 11/28/2023
 Rated by Rachael Hyland, Casey Lanier Trained by Ecology? Yes No Date of training 3/2019
 HGM Class used for rating Depressional Wetland has multiple HGM classes? Y N

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

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

1. Category of wetland based on FUNCTIONS

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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	M	M	M	
Landscape Potential	M	M	H	
Value	H	M	M	TOTAL
Score Based on Ratings	7	6	7	20

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number U

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number U

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number U

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?	
D 1.1. <u>Characteristics of surface water outflows from the wetland:</u> Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. 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.	points = 3 points = 2 points = 1 points = 1 2
D 1.2. <u>The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions).</u> Yes = 4 No = 0	0
D 1.3. <u>Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes):</u> Wetland has persistent, ungrazed, plants > 95% of area Wetland has persistent, ungrazed, plants > ½ of area Wetland has persistent, ungrazed plants > 1/10 of area Wetland has persistent, ungrazed plants < 1/10 of area	points = 5 points = 3 points = 1 points = 0 3
D 1.4. <u>Characteristics of seasonal ponding or inundation:</u> <i>This is the area that is ponded for at least 2 months. See description in manual.</i> Area seasonally ponded is > ½ total area of wetland Area seasonally ponded is > ¼ total area of wetland Area seasonally ponded is < ¼ total area of wetland	points = 4 points = 2 points = 0 4
Total for D 1	9 Add the points in the boxes above

Rating of Site Potential If score is: 12-16 = H X 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?	
D 2.1. Does the wetland unit receive stormwater discharges?	Yes = 1 No = 0 1
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants?	Yes = 1 No = 0 0
D 2.3. Are there septic systems within 250 ft of the wetland?	Yes = 1 No = 0 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 _____	Yes = 1 No = 0 0
Total for D 2	1 Add the points in the boxes above

Rating of Landscape Potential If score is: 3 or 4 = H X 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 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 = 0 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
D 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 basin in which the unit is found)?	Yes = 2 No = 0 2
Total for D 3	2 Add the points in the boxes above

Rating of Value If score is: X 2-4 = H 1 = M 0 = L Record the rating on the first page

NOTES and FIELD OBSERVATIONS:

Wetland name or number U

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. Characteristics of surface water outflows from the wetland:		
Wetland is a depression or flat depression with no surface water leaving it (no outlet)	points = 4	2
Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet	points = 2	
Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch	points = 1	
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	
D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part.		
Marks of ponding are 3 ft or more above the surface or bottom of outlet	points = 7	3
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 "headwater" wetland	points = 3	
Wetland is flat but has small depressions on the surface that trap water	points = 1	
Marks of ponding less than 0.5 ft (6 in)	points = 0	
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 less than 10 times the area of the unit	points = 5	3
The area of the basin is 10 to 100 times the area of the unit	points = 3	
The area of the basin is more than 100 times the area of the unit	points = 0	
Entire wetland is in the Flats class	points = 5	
Total for D 4	Add the points in the boxes above	8

Rating of Site Potential If score is: 12-16 = H X 6-11 = M 0-5 = L Record the rating on the 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?	Yes = 1 No = 0	1
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
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)?	Yes = 1 No = 0	1
Total for D 5	Add the points in the boxes above	2

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

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 around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met.		
The wetland 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):		1
• Flooding occurs in a sub-basin that is immediately down-gradient of unit.	points = 2	
• Surface flooding problems are in a sub-basin farther down-gradient.	points = 1	
Flooding from groundwater is an issue in the sub-basin.	points = 1	
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 _____	points = 0	
There are no problems with flooding downstream of the wetland.	points = 0	
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 = 0	0
Total for D 6	Add the points in the boxes above	1

Rating of Value If score is: 2-4 = H X 1 = M 0 = L Record the rating on the first page

Wetland name or number U

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: *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 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
 - Emergent 3 structures: points = 2
 - Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1
 - Forested (areas where trees have > 30% cover) 1 structure: points = 0
- If the unit has a Forested class, check if:*
- 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

1

H 1.2. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- Permanently flooded or inundated 4 or more types present: points = 3
- Seasonally flooded or inundated 3 types present: points = 2
- Occasionally flooded or inundated 2 types present: points = 1
- Saturated only 1 type present: points = 0
- Permanently flowing stream or river in, or adjacent to, the wetland
- Seasonally flowing stream in, or adjacent to, the wetland
- Lake Fringe wetland** **2 points**
- Freshwater tidal wetland** **2 points**

1

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft².

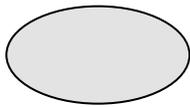
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

- If you counted: > 19 species points = 2
- 5 - 19 species points = 1
- < 5 species points = 0

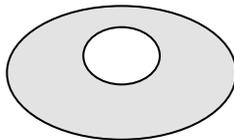
1

H 1.4. Interspersion of habitats

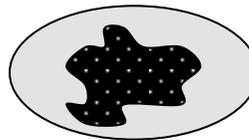
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



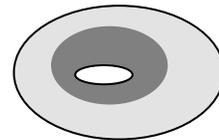
None = 0 points



Low = 1 point

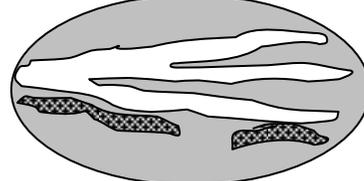
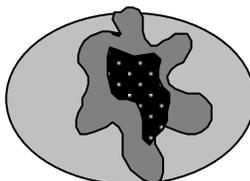
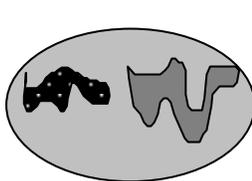


Moderate = 2 points



1

All three diagrams in this row are **HIGH** = 3points



Wetland name or number U

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input checked="" type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input checked="" type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input type="checkbox"/> 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)</p> <p><input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input checked="" type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>	3
<p>Total for H 1</p>	<p>Add the points in the boxes above</p> <p>7</p>

Rating of Site Potential If score is: 15-18 = H 7-14 = M 0-6 = L *Record the rating on the first page*

<p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>	
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <input type="text" value="20.67"/> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>	2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.2"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <input type="text" value="51.72499999999999"/> %</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>	0
<p>Total for H 2</p>	<p>Add the points in the boxes above</p> <p>5</p>

Rating of Landscape Potential If score is: 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

<p>H 3.0. Is the habitat provided by the site valuable to society?</p>	
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p>— It has 3 or more priority habitats within 100 m (see next page)</p> <p>— It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p>— It is mapped as a location for an individual WDFW priority species</p> <p>— It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p>— 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</p> <p><input checked="" type="checkbox"/> Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>	1

Rating of Value If score is: 2 = H 1 = M 0 = L *Record the rating on the first page*

Wetland name or number U

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

Wetland name or number U

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt</p> <p style="text-align: right;"><input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25)</p> <p><input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland.</p> <p><input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4</p> <p>NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

Wetland name or number U

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has 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 ¾ 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 1/10 ac (4350 ft²) <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Wetland name or number V

RATING SUMMARY – Western Washington

Name of wetland (or ID #): V Date of site visit: 11/28/2023
 Rated by Rachael Hyland, Casey Lanier Trained by Ecology? Yes No Date of training 3/2019
 HGM Class used for rating Depressional Wetland has multiple HGM classes? Y N

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

OVERALL WETLAND CATEGORY III (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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	M	M	L	
Landscape Potential	L	L	H	
Value	H	M	H	TOTAL
Score Based on Ratings	6	5	7	18

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number V

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number V

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number V

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?	
D 1.1. <u>Characteristics of surface water outflows from the wetland:</u> Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. 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.	points = 3 points = 2 points = 1 points = 1 2
D 1.2. <u>The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions).</u> Yes = 4 No = 0	4
D 1.3. <u>Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes):</u> Wetland has persistent, ungrazed, plants > 95% of area Wetland has persistent, ungrazed, plants > ½ of area Wetland has persistent, ungrazed plants > 1/10 of area Wetland has persistent, ungrazed plants < 1/10 of area	points = 5 points = 3 points = 1 points = 0 3
D 1.4. <u>Characteristics of seasonal ponding or inundation:</u> <i>This is the area that is ponded for at least 2 months. See description in manual.</i> Area seasonally ponded is > ½ total area of wetland Area seasonally ponded is > ¼ total area of wetland Area seasonally ponded is < ¼ total area of wetland	points = 4 points = 2 points = 0 0
Total for D 1	9 Add the points in the boxes above

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?	
D 2.1. Does the wetland unit receive stormwater discharges?	Yes = 1 No = 0 0
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants?	Yes = 1 No = 0 0
D 2.3. Are there septic systems within 250 ft of the wetland?	Yes = 1 No = 0 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 _____	Yes = 1 No = 0 0
Total for D 2	0 Add the points in the boxes above

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 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 = 0 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
D 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 basin in which the unit is found)?	Yes = 2 No = 0 2
Total for D 3	2 Add the points in the boxes above

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

NOTES and FIELD OBSERVATIONS:

Wetland name or number V

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. Characteristics of surface water outflows from the wetland:		
Wetland is a depression or flat depression with no surface water leaving it (no outlet)	points = 4	2
Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet	points = 2	
Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch	points = 1	
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	
D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part.		
Marks of ponding are 3 ft or more above the surface or bottom of outlet	points = 7	3
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 "headwater" wetland	points = 3	
Wetland is flat but has small depressions on the surface that trap water	points = 1	
Marks of ponding less than 0.5 ft (6 in)	points = 0	
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 less than 10 times the area of the unit	points = 5	3
The area of the basin is 10 to 100 times the area of the unit	points = 3	
The area of the basin is more than 100 times the area of the unit	points = 0	
Entire wetland is in the Flats class	points = 5	
Total for D 4	Add the points in the boxes above	8

Rating of Site Potential If score is: 12-16 = H X 6-11 = M 0-5 = L Record the rating on the 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?	Yes = 1 No = 0	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
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)?	Yes = 1 No = 0	0
Total for D 5	Add the points in the boxes above	0

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

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 around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met.		
The wetland 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):		1
• Flooding occurs in a sub-basin that is immediately down-gradient of unit.	points = 2	
• Surface flooding problems are in a sub-basin farther down-gradient.	points = 1	
Flooding from groundwater is an issue in the sub-basin.	points = 1	
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 _____	points = 0	
There are no problems with flooding downstream of the wetland.	points = 0	
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 = 0	0
Total for D 6	Add the points in the boxes above	1

Rating of Value If score is: 2-4 = H X 1 = M 0 = L Record the rating on the first page

Wetland name or number V

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: *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 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
 - Emergent 3 structures: points = 2
 - Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1
 - Forested (areas where trees have > 30% cover) 1 structure: points = 0
- If the unit has a Forested class, check if:*
- 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

0

H 1.2. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- Permanently flooded or inundated 4 or more types present: points = 3
- Seasonally flooded or inundated 3 types present: points = 2
- Occasionally flooded or inundated 2 types present: points = 1
- Saturated only 1 type present: points = 0
- Permanently flowing stream or river in, or adjacent to, the wetland
- Seasonally flowing stream in, or adjacent to, the wetland
- Lake Fringe wetland** **2 points**
- Freshwater tidal wetland** **2 points**

0

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft².

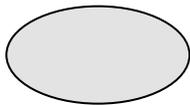
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

- If you counted: > 19 species points = 2
- 5 - 19 species points = 1
- < 5 species points = 0

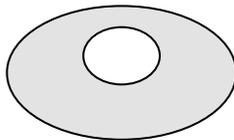
1

H 1.4. Interspersion of habitats

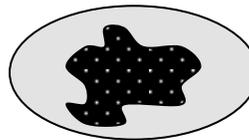
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



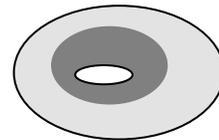
None = 0 points



Low = 1 point

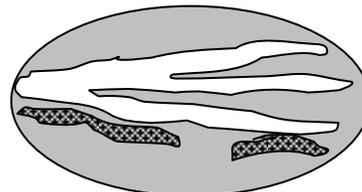
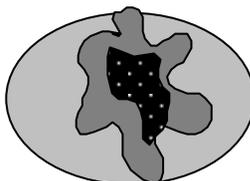
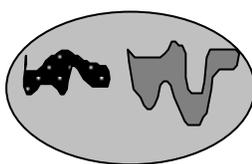


Moderate = 2 points



0

All three diagrams in this row are **HIGH** = 3points



Wetland name or number V

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input checked="" type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input checked="" type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input type="checkbox"/> 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)</p> <p><input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input checked="" type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>	3
<p>Total for H 1</p>	<p>Add the points in the boxes above</p> <p>4</p>

Rating of Site Potential If score is: 15-18 = H 7-14 = M 0-6 = L *Record the rating on the first page*

<p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>	
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <u>20.67</u> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>	2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.2"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <u>51.72499999999999</u> %</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>	0
<p>Total for H 2</p>	<p>Add the points in the boxes above</p> <p>5</p>

Rating of Landscape Potential If score is: 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

<p>H 3.0. Is the habitat provided by the site valuable to society?</p>	
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p><input checked="" type="checkbox"/> It has 3 or more priority habitats within 100 m (see next page)</p> <p><input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p><input type="checkbox"/> It is mapped as a location for an individual WDFW priority species</p> <p><input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p><input type="checkbox"/> 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</p> <p>Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>	2

Rating of Value If score is: 2 = H 1 = M 0 = L *Record the rating on the first page*

Wetland name or number V

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

Wetland name or number V

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt</p> <p style="text-align: right;"><input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25)</p> <p><input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland.</p> <p><input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4</p> <p>NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

Wetland name or number V

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has 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 ¾ 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 1/10 ac (4350 ft²) <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Wetland name or number W

RATING SUMMARY – Western Washington

Name of wetland (or ID #): W Date of site visit: 11/28/2023
 Rated by Rachael Hyland, Casey Lanier Trained by Ecology? Yes No Date of training 3/2019
 HGM Class used for rating Depressional Wetland has multiple HGM classes? Y N

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

OVERALL WETLAND CATEGORY III (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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	M	L	L	
Landscape Potential	M	M	H	
Value	H	M	M	TOTAL
Score Based on Ratings	7	5	6	18

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number W

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number W

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number W

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?	
D 1.1. <u>Characteristics of surface water outflows from the wetland:</u> Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. 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.	points = 3 points = 2 points = 1 points = 1 3
D 1.2. <u>The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions).</u> Yes = 4 No = 0	0
D 1.3. <u>Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes):</u> Wetland has persistent, ungrazed, plants > 95% of area Wetland has persistent, ungrazed, plants > ½ of area Wetland has persistent, ungrazed plants > 1/10 of area Wetland has persistent, ungrazed plants < 1/10 of area	points = 5 points = 3 points = 1 points = 0 3
D 1.4. <u>Characteristics of seasonal ponding or inundation:</u> <i>This is the area that is ponded for at least 2 months. See description in manual.</i> Area seasonally ponded is > ½ total area of wetland Area seasonally ponded is > ¼ total area of wetland Area seasonally ponded is < ¼ total area of wetland	points = 4 points = 2 points = 0 0
Total for D 1	6 Add the points in the boxes above

Rating of Site Potential If score is: 12-16 = H X 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?	
D 2.1. Does the wetland unit receive stormwater discharges?	Yes = 1 No = 0 0
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants?	Yes = 1 No = 0 1
D 2.3. Are there septic systems within 250 ft of the wetland?	Yes = 1 No = 0 1
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 _____	Yes = 1 No = 0 0
Total for D 2	2 Add the points in the boxes above

Rating of Landscape Potential If score is: 3 or 4 = H X 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 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 = 0 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
D 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 basin in which the unit is found)?	Yes = 2 No = 0 2
Total for D 3	2 Add the points in the boxes above

Rating of Value If score is: X 2-4 = H 1 = M 0 = L Record the rating on the first page

NOTES and FIELD OBSERVATIONS:

Wetland name or number W

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. Characteristics of surface water outflows from the wetland:		
Wetland is a depression or flat depression with no surface water leaving it (no outlet)	points = 4	4
Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet	points = 2	
Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch	points = 1	
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	
D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part.		
Marks of ponding are 3 ft or more above the surface or bottom of outlet	points = 7	0
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 "headwater" wetland	points = 3	
Wetland is flat but has small depressions on the surface that trap water	points = 1	
Marks of ponding less than 0.5 ft (6 in)	points = 0	
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 less than 10 times the area of the unit	points = 5	0
The area of the basin is 10 to 100 times the area of the unit	points = 3	
The area of the basin is more than 100 times the area of the unit	points = 0	
Entire wetland is in the Flats class	points = 5	
Total for D 4	Add the points in the boxes above	4

Rating of Site Potential If score is: 12-16 = H 6-11 = M X 0-5 = L Record the rating on the 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?	Yes = 1 No = 0	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	1
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)?	Yes = 1 No = 0	1
Total for D 5	Add the points in the boxes above	2

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

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 around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met.		
The wetland 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):		1
• Flooding occurs in a sub-basin that is immediately down-gradient of unit.	points = 2	
• Surface flooding problems are in a sub-basin farther down-gradient.	points = 1	
Flooding from groundwater is an issue in the sub-basin.	points = 1	
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 _____	points = 0	
There are no problems with flooding downstream of the wetland. _____	points = 0	
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 = 0	0
Total for D 6	Add the points in the boxes above	1

Rating of Value If score is: 2-4 = H X 1 = M 0 = L Record the rating on the first page

Wetland name or number W

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: *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 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
 - Emergent 3 structures: points = 2
 - Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1
 - Forested (areas where trees have > 30% cover) 1 structure: points = 0
- If the unit has a Forested class, check if:*
- 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

0

H 1.2. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- Permanently flooded or inundated 4 or more types present: points = 3
- Seasonally flooded or inundated 3 types present: points = 2
- Occasionally flooded or inundated 2 types present: points = 1
- Saturated only 1 type present: points = 0
- Permanently flowing stream or river in, or adjacent to, the wetland
- Seasonally flowing stream in, or adjacent to, the wetland
- Lake Fringe wetland** **2 points**
- Freshwater tidal wetland** **2 points**

0

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft².

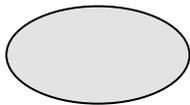
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

- If you counted: > 19 species points = 2
- 5 - 19 species points = 1
- < 5 species points = 0

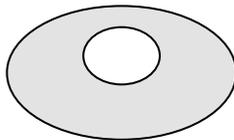
1

H 1.4. Interspersion of habitats

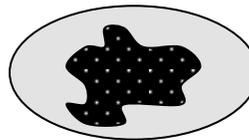
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



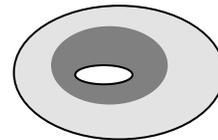
None = 0 points



Low = 1 point

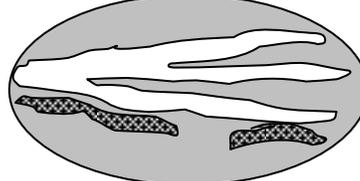
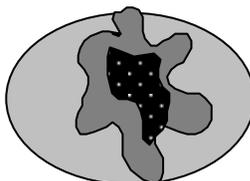
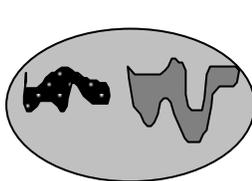


Moderate = 2 points



0

All three diagrams in this row are **HIGH** = 3points



Wetland name or number W

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input checked="" type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input checked="" type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input type="checkbox"/> 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)</p> <p><input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input checked="" type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>	3
<p>Total for H 1</p> <p style="text-align: right;">Add the points in the boxes above</p>	4

Rating of Site Potential If score is: 15-18 = H 7-14 = M 0-6 = L *Record the rating on the first page*

H 2.0. Does the landscape have the potential to support the habitat functions of the site?	
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <input type="text" value="20.67"/> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>	2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.2"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <input type="text" value="51.72499999999999"/> %</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>	0
<p>Total for H 2</p> <p style="text-align: right;">Add the points in the boxes above</p>	5

Rating of Landscape Potential If score is: 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

H 3.0. Is the habitat provided by the site valuable to society?	
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p>— It has 3 or more priority habitats within 100 m (see next page)</p> <p>— It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p>— It is mapped as a location for an individual WDFW priority species</p> <p>— It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p>— 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</p> <p><input checked="" type="checkbox"/> Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>	1

Rating of Value If score is: 2 = H 1 = M 0 = L *Record the rating on the first page*

Wetland name or number W

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

Wetland name or number W

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt</p> <p style="text-align: right;"><input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25)</p> <p><input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland.</p> <p><input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4</p> <p>NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

Wetland name or number W

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has 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 ¾ 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 1/10 ac (4350 ft²) <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Wetland name or number X

RATING SUMMARY – Western Washington

Name of wetland (or ID #): X Date of site visit: 11/16/23
 Rated by Casey Lanier, Garret Jordan Trained by Ecology? Yes No Date of training 3/2019
 HGM Class used for rating Slope Wetland has multiple HGM classes? Y N

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

OVERALL WETLAND CATEGORY III (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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	M	L	L	
Landscape Potential	L	L	H	
Value	H	M	H	TOTAL
Score Based on Ratings	6	4	7	17

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number X

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number X

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number X

SLOPE WETLANDS

Water Quality Functions - Indicators that the site functions 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: <i>(a 1% slope has a 1 ft vertical drop in elevation for every 100 ft of horizontal distance)</i>			1
Slope is 1% or less	points = 3		
Slope is > 1%-2%	points = 2		
Slope is > 2%-5%	points = 1		
Slope is greater than 5%	points = 0		
S 1.2. <u>The soil 2 in below the surface (or duff layer)</u> is true clay or true organic <i>(use NRCS definitions)</i> : Yes = 3 No = 0			3
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollutants: Choose the points appropriate for the description that best fits the plants in the wetland. <i>Dense means you have trouble seeing the soil surface (>75% cover), and uncut means not grazed or mowed and plants are higher than 6 in.</i>			2
Dense, uncut, herbaceous plants > 90% of the wetland area	points = 6		
Dense, uncut, herbaceous plants > ½ of area	points = 3		
Dense, woody, plants > ½ of area	points = 2		
Dense, uncut, herbaceous plants > ¼ of area	points = 1		
Does not meet any of the criteria above for plants	points = 0		
Total for S 1		Add the points in the boxes above	6

Rating of Site Potential If score is: 12 = H X 6-11 = M 0-5 = L

Record the rating on the first page

S 2.0. Does the landscape have the potential to support the water quality function of the site?			
S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in land uses that generate pollutants?	Yes = 1 No = 0		0
S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other sources _____	Yes = 1 No = 0		0
Total for S 2		Add the points in the boxes above	0

Rating of Landscape Potential If score is: 1-2 = M X 0 = L

Record the rating on the first page

S 3.0. Is the water quality improvement provided by the site valuable to society?			
S 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 = 0		0
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? <i>At least one aquatic resource in the basin is on the 303(d) list.</i>	Yes = 1 No = 0		0
S 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? <i>Answer YES if there is a TMDL for the basin in which unit is found.</i>	Yes = 2 No = 0		2
Total for S 3		Add the points in the boxes above	2

Rating of Value If score is: X 2-4 = H 1 = M 0 = L

Record the rating on the first page

Wetland name or number X

SLOPE WETLANDS

Hydrologic Functions - Indicators that the site functions to reduce flooding and stream erosion

S 4.0. Does the site have the potential to reduce flooding and stream erosion?

S 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. <i>Stems of plants should be thick enough (usually > 1/8 in), or dense enough, to remain erect during surface flows.</i>	0
Dense, uncut, rigid plants cover > 90% of the area of the wetland	
All other conditions	

points = 1
points = 0

Rating of Site Potential If score is: 1 = M X 0 = L

Record the rating on the first page

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

S 5.1. Is more than 25% of the area within 150 ft upslope of wetland in land uses or cover that generate excess surface runoff?	0
---	---

Yes = 1 No = 0

Rating of Landscape Potential If score is: 1 = M X 0 = L

Record the rating on the first page

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 redds)	1
Surface flooding problems are in a sub-basin farther down-gradient	
No flooding problems anywhere downstream	

points = 2
points = 1
points = 0

S 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan?	0
--	---

Yes = 2 No = 0

Total for S 6	1
---------------	---

Add the points in the boxes above

Rating of Value If score is: 2-4 = H X 1 = M 0 = L

Record the rating on the first page

NOTES and FIELD OBSERVATIONS:

Wetland name or number X

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: *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 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
 - Emergent 3 structures: points = 2
 - Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1
 - Forested (areas where trees have > 30% cover) 1 structure: points = 0
- If the unit has a Forested class, check if:*
- 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

0

H 1.2. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- Permanently flooded or inundated 4 or more types present: points = 3
- Seasonally flooded or inundated 3 types present: points = 2
- Occasionally flooded or inundated 2 types present: points = 1
- Saturated only 1 type present: points = 0
- Permanently flowing stream or river in, or adjacent to, the wetland
- Seasonally flowing stream in, or adjacent to, the wetland
- Lake Fringe wetland** **2 points**
- Freshwater tidal wetland** **2 points**

0

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft².

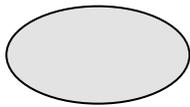
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

- If you counted: > 19 species points = 2
- 5 - 19 species points = 1
- < 5 species points = 0

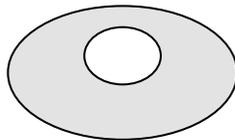
1

H 1.4. Interspersion of habitats

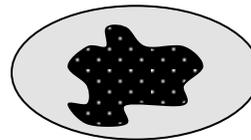
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



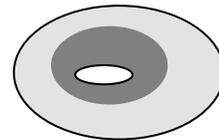
None = 0 points



Low = 1 point

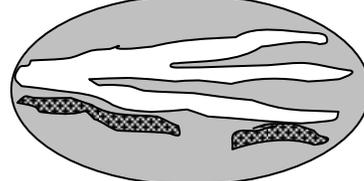
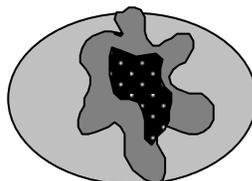
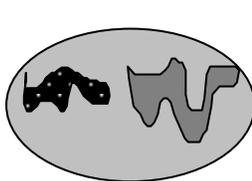


Moderate = 2 points



0

All three diagrams in this row are **HIGH** = 3points



Wetland name or number X

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input checked="" type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input checked="" type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input checked="" type="checkbox"/> 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)</p> <p><input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>	3
<p>Total for H 1</p>	<p>Add the points in the boxes above</p> <p>4</p>

Rating of Site Potential If score is: 15-18 = H 7-14 = M X 0-6 = L *Record the rating on the first page*

<p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>	
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <u>20.67</u> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>	2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.2"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <u>51.72499999999999</u> %</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>	0
<p>Total for H 2</p>	<p>Add the points in the boxes above</p> <p>5</p>

Rating of Landscape Potential If score is: X 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

<p>H 3.0. Is the habitat provided by the site valuable to society?</p>	
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p><input checked="" type="checkbox"/> It has 3 or more priority habitats within 100 m (see next page)</p> <p><input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p><input type="checkbox"/> It is mapped as a location for an individual WDFW priority species</p> <p><input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p><input type="checkbox"/> 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</p> <p>Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>	2

Rating of Value If score is: X 2 = H 1 = M 0 = L *Record the rating on the first page*

Wetland name or number X

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

Wetland name or number X

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt <input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25) <input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland. <input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? <input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf <input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4 NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

Wetland name or number X

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has 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 ¾ 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 1/10 ac (4350 ft²) <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Wetland name or number Y

RATING SUMMARY – Western Washington

Name of wetland (or ID #): Y Date of site visit: 11/15/23
 Rated by Rachael Hyland, Amanda Smith Trained by Ecology? Yes No Date of training 3/2019
 HGM Class used for rating Slope Wetland has multiple HGM classes? Y N

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

OVERALL WETLAND CATEGORY III (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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	L	L	M	
Landscape Potential	L	L	H	
Value	H	M	H	TOTAL
Score Based on Ratings	5	4	8	17

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number Y

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number Y

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number Y

SLOPE WETLANDS

Water Quality Functions - Indicators that the site functions 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: <i>(a 1% slope has a 1 ft vertical drop in elevation for every 100 ft of horizontal distance)</i> Slope is 1% or less points = 3 Slope is > 1%-2% points = 2 Slope is > 2%-5% points = 1 Slope is greater than 5% points = 0	0	
S 1.2. <u>The soil 2 in below the surface (or duff layer)</u> is true clay or true organic <i>(use NRCS definitions)</i> : Yes = 3 No = 0		3
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollutants: Choose the points appropriate for the description that best fits the plants in the wetland. <i>Dense means you have trouble seeing the soil surface (>75% cover), and uncut means not grazed or mowed and plants are higher than 6 in.</i> Dense, uncut, herbaceous plants > 90% of the wetland area points = 6 Dense, uncut, herbaceous plants > ½ of area points = 3 Dense, woody, plants > ½ of area points = 2 Dense, uncut, herbaceous plants > ¼ of area points = 1 Does not meet any of the criteria above for plants points = 0	2	
Total for S 1 Add the points in the boxes above		5

Rating of Site Potential If score is: 12 = H 6-11 = M X 0-5 = L

Record the rating on the first page

S 2.0. Does the landscape have the potential to support the water quality function of the site?		
S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in land uses that generate pollutants? Yes = 1 No = 0	0	
S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other sources _____ Yes = 1 No = 0	0	
Total for S 2 Add the points in the boxes above		0

Rating of Landscape Potential If score is: 1-2 = M X 0 = L

Record the rating on the first page

S 3.0. Is the water quality improvement provided by the site valuable to society?		
S 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 = 0	0	
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? <i>At least one aquatic resource in the basin is on the 303(d) list.</i> Yes = 1 No = 0	0	
S 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? <i>Answer YES if there is a TMDL for the basin in which unit is found.</i> Yes = 2 No = 0	2	
Total for S 3 Add the points in the boxes above		2

Rating of Value If score is: X 2-4 = H 1 = M 0 = L

Record the rating on the first page

Wetland name or number Y

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: *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 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
 - Emergent 3 structures: points = 2
 - Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1
 - Forested (areas where trees have > 30% cover) 1 structure: points = 0
- If the unit has a Forested class, check if:*
- 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

1

H 1.2. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- Permanently flooded or inundated 4 or more types present: points = 3
- Seasonally flooded or inundated 3 types present: points = 2
- Occasionally flooded or inundated 2 types present: points = 1
- Saturated only 1 type present: points = 0
- Permanently flowing stream or river in, or adjacent to, the wetland
- Seasonally flowing stream in, or adjacent to, the wetland
- Lake Fringe wetland** **2 points**
- Freshwater tidal wetland** **2 points**

0

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft².

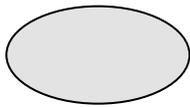
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

- If you counted: > 19 species points = 2
- 5 - 19 species points = 1
- < 5 species points = 0

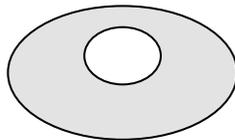
1

H 1.4. Interspersion of habitats

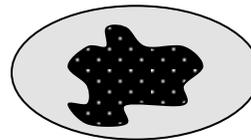
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



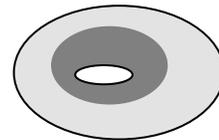
None = 0 points



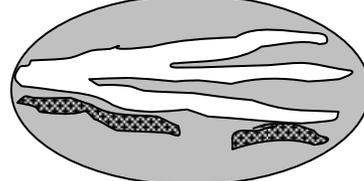
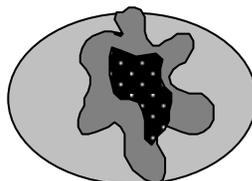
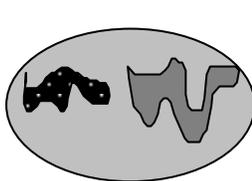
Low = 1 point



Moderate = 2 points



All three diagrams in this row are **HIGH** = 3points



1

Wetland name or number Y

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input checked="" type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input checked="" type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input checked="" type="checkbox"/> 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)</p> <p><input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input checked="" type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>	4
<p>Total for H 1</p>	<p>Add the points in the boxes above</p> <p>7</p>

Rating of Site Potential If score is: 15-18 = H 7-14 = M 0-6 = L *Record the rating on the first page*

<p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>	
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <input type="text" value="20.67"/> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>	2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.2"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <input type="text" value="51.72499999999999"/> %</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>	0
<p>Total for H 2</p>	<p>Add the points in the boxes above</p> <p>5</p>

Rating of Landscape Potential If score is: 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

<p>H 3.0. Is the habitat provided by the site valuable to society?</p>	
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p><input checked="" type="checkbox"/> It has 3 or more priority habitats within 100 m (see next page)</p> <p><input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p><input type="checkbox"/> It is mapped as a location for an individual WDFW priority species</p> <p><input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p><input type="checkbox"/> 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</p> <p>Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>	2

Rating of Value If score is: 2 = H 1 = M 0 = L *Record the rating on the first page*

Wetland name or number Y

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

Wetland name or number Y

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt <input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25) <input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland. <input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? <input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf <input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4 NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

Wetland name or number Y

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none">— Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none">— The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none">— The wetland is relatively undisturbed (has 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 ¾ 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 1/10 ac (4350 ft²) <p><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none">— Long Beach Peninsula: Lands west of SR 103— Grayland-Westport: Lands west of SR 105— Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Wetland name or number Y

This page left blank intentionally

Wetland name or number Z

RATING SUMMARY – Western Washington

Name of wetland (or ID #): Z Date of site visit: 9/18/2024
 Rated by Casey Lanier Trained by Ecology? Yes No Date of training 12/2021
 HGM Class used for rating Depressional Wetland has multiple HGM classes? Y N

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

OVERALL WETLAND CATEGORY IV (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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	L	L	L	
Landscape Potential	L	L	H	
Value	H	M	M	TOTAL
Score Based on Ratings	5	4	6	15

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number Z

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number Z

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number Z

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?		
D 1.1. <u>Characteristics of surface water outflows from the wetland:</u> Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. 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.	points = 3 points = 2 points = 1 points = 1	3
D 1.2. <u>The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions).</u> Yes = 4 No = 0		0
D 1.3. <u>Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes):</u> Wetland has persistent, ungrazed, plants > 95% of area Wetland has persistent, ungrazed, plants > ½ of area Wetland has persistent, ungrazed plants > 1/10 of area Wetland has persistent, ungrazed plants < 1/10 of area	points = 5 points = 3 points = 1 points = 0	1
D 1.4. <u>Characteristics of seasonal ponding or inundation:</u> <i>This is the area that is ponded for at least 2 months. See description in manual.</i> Area seasonally ponded is > ½ total area of wetland Area seasonally ponded is > ¼ total area of wetland Area seasonally ponded is < ¼ total area of wetland	points = 4 points = 2 points = 0	0
Total for D 1 Add the points in the boxes above		4

Rating of Site Potential If score is: 12-16 = H 6-11 = M X 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?		
D 2.1. Does the wetland unit receive stormwater discharges?	Yes = 1 No = 0	0
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants?	Yes = 1 No = 0	0
D 2.3. Are there septic systems within 250 ft of the wetland?	Yes = 1 No = 0	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 _____	Yes = 1 No = 0	0
Total for D 2 Add the points in the boxes above		0

Rating of Landscape Potential If score is: 3 or 4 = H 1 or 2 = M X 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 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 = 0	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
D 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 basin in which the unit is found)?	Yes = 2 No = 0	2
Total for D 3 Add the points in the boxes above		2

Rating of Value If score is: X 2-4 = H 1 = M 0 = L Record the rating on the first page

NOTES and FIELD OBSERVATIONS:

Wetland name or number Z

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. Characteristics of surface water outflows from the wetland:		
Wetland is a depression or flat depression with no surface water leaving it (no outlet)	points = 4	4
Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet	points = 2	
Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch	points = 1	
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	
D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part.		
Marks of ponding are 3 ft or more above the surface or bottom of outlet	points = 7	0
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 "headwater" wetland	points = 3	
Wetland is flat but has small depressions on the surface that trap water	points = 1	
Marks of ponding less than 0.5 ft (6 in)	points = 0	
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 less than 10 times the area of the unit	points = 5	0
The area of the basin is 10 to 100 times the area of the unit	points = 3	
The area of the basin is more than 100 times the area of the unit	points = 0	
Entire wetland is in the Flats class	points = 5	
Total for D 4	Add the points in the boxes above	4

Rating of Site Potential If score is: 12-16 = H 6-11 = M X 0-5 = L Record the rating on the 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?	Yes = 1 No = 0	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
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)?	Yes = 1 No = 0	0
Total for D 5	Add the points in the boxes above	0

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

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 around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met.		
The wetland 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):		1
• Flooding occurs in a sub-basin that is immediately down-gradient of unit.	points = 2	
• Surface flooding problems are in a sub-basin farther down-gradient.	points = 1	
Flooding from groundwater is an issue in the sub-basin.	points = 1	
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 _____	points = 0	
There are no problems with flooding downstream of the wetland.	points = 0	
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 = 0	0
Total for D 6	Add the points in the boxes above	1

Rating of Value If score is: 2-4 = H X 1 = M 0 = L Record the rating on the first page

Wetland name or number Z

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: *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 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
 - Emergent 3 structures: points = 2
 - Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1
 - Forested (areas where trees have > 30% cover) 1 structure: points = 0
- If the unit has a Forested class, check if:*
- 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

0

H 1.2. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- Permanently flooded or inundated 4 or more types present: points = 3
- Seasonally flooded or inundated 3 types present: points = 2
- Occasionally flooded or inundated 2 types present: points = 1
- Saturated only 1 type present: points = 0
- Permanently flowing stream or river in, or adjacent to, the wetland
- Seasonally flowing stream in, or adjacent to, the wetland
- Lake Fringe wetland** **2 points**
- Freshwater tidal wetland** **2 points**

0

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft².

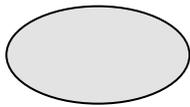
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

- If you counted: > 19 species points = 2
- 5 - 19 species points = 1
- < 5 species points = 0

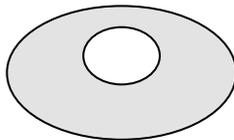
1

H 1.4. Interspersion of habitats

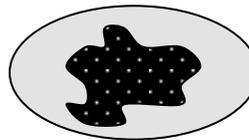
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



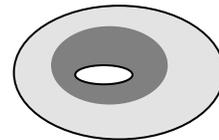
None = 0 points



Low = 1 point

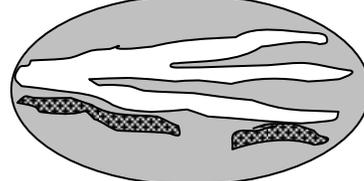
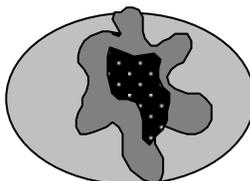
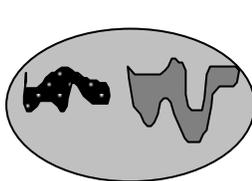


Moderate = 2 points



0

All three diagrams in this row are **HIGH** = 3points



Wetland name or number Z

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input checked="" type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input type="checkbox"/> 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)</p> <p><input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>	1
<p>Total for H 1</p>	<p>Add the points in the boxes above</p> <p>2</p>

Rating of Site Potential If score is: 15-18 = H 7-14 = M 0-6 = L *Record the rating on the first page*

<p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>	
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <u>20.67</u> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>	2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.20"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <u>51.72499999999999</u> %</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>	0
<p>Total for H 2</p>	<p>Add the points in the boxes above</p> <p>5</p>

Rating of Landscape Potential If score is: 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

<p>H 3.0. Is the habitat provided by the site valuable to society?</p>	
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p>— It has 3 or more priority habitats within 100 m (see next page)</p> <p>— It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p>— It is mapped as a location for an individual WDFW priority species</p> <p>— It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p>— 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</p> <p><input checked="" type="checkbox"/> Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>	1

Rating of Value If score is: 2 = H 1 = M 0 = L *Record the rating on the first page*

Wetland name or number Z

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

Wetland name or number Z

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt <input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25) <input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. <input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? <input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf <input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4 NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

Wetland name or number Z

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has 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 ¾ 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 1/10 ac (4350 ft²) <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Wetland name or number 1

RATING SUMMARY – Western Washington

Name of wetland (or ID #): 1 Date of site visit: 12/2023
 Rated by Rachael Hyland, Casey Lanier Trained by Ecology? Yes No Date of training 3/2019
 HGM Class used for rating Depressional Wetland has multiple HGM classes? Y N

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

OVERALL WETLAND CATEGORY IV (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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	M	L	L	
Landscape Potential	L	L	L	
Value	H	M	M	TOTAL
Score Based on Ratings	6	4	4	14

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number 1

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number 1

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number 1

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?	
D 1.1. <u>Characteristics of surface water outflows from the wetland:</u> Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. 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.	points = 3 points = 2 points = 1 points = 1 3
D 1.2. <u>The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions).</u> Yes = 4 No = 0	0
D 1.3. <u>Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes):</u> Wetland has persistent, ungrazed, plants > 95% of area Wetland has persistent, ungrazed, plants > ½ of area Wetland has persistent, ungrazed plants > 1/10 of area Wetland has persistent, ungrazed plants < 1/10 of area	points = 5 points = 3 points = 1 points = 0 3
D 1.4. <u>Characteristics of seasonal ponding or inundation:</u> <i>This is the area that is ponded for at least 2 months. See description in manual.</i> Area seasonally ponded is > ½ total area of wetland Area seasonally ponded is > ¼ total area of wetland Area seasonally ponded is < ¼ total area of wetland	points = 4 points = 2 points = 0 4
Total for D 1	10 Add the points in the boxes above

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?	
D 2.1. Does the wetland unit receive stormwater discharges?	Yes = 1 No = 0 0
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants?	Yes = 1 No = 0 0
D 2.3. Are there septic systems within 250 ft of the wetland?	Yes = 1 No = 0 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 _____	Yes = 1 No = 0 0
Total for D 2	0 Add the points in the boxes above

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 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 = 0 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
D 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 basin in which the unit is found)?	Yes = 2 No = 0 2
Total for D 3	2 Add the points in the boxes above

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

NOTES and FIELD OBSERVATIONS:

Wetland name or number 1

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. Characteristics of surface water outflows from the wetland:		
Wetland is a depression or flat depression with no surface water leaving it (no outlet)	points = 4	4
Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet	points = 2	
Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch	points = 1	
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	
D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part.		
Marks of ponding are 3 ft or more above the surface or bottom of outlet	points = 7	0
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 "headwater" wetland	points = 3	
Wetland is flat but has small depressions on the surface that trap water	points = 1	
Marks of ponding less than 0.5 ft (6 in)	points = 0	
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 less than 10 times the area of the unit	points = 5	0
The area of the basin is 10 to 100 times the area of the unit	points = 3	
The area of the basin is more than 100 times the area of the unit	points = 0	
Entire wetland is in the Flats class	points = 5	
Total for D 4	Add the points in the boxes above	4

Rating of Site Potential If score is: 12-16 = H 6-11 = M X 0-5 = L Record the rating on the 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?	Yes = 1 No = 0	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
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)?	Yes = 1 No = 0	0
Total for D 5	Add the points in the boxes above	0

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

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 around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met.		
The wetland 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):		1
• Flooding occurs in a sub-basin that is immediately down-gradient of unit.	points = 2	
• Surface flooding problems are in a sub-basin farther down-gradient.	points = 1	
Flooding from groundwater is an issue in the sub-basin.	points = 1	
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 _____	points = 0	
There are no problems with flooding downstream of the wetland.	points = 0	
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 = 0	0
Total for D 6	Add the points in the boxes above	1

Rating of Value If score is: 2-4 = H X 1 = M 0 = L Record the rating on the first page

Wetland name or number 1

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: *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 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
 - Emergent 3 structures: points = 2
 - Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1
 - Forested (areas where trees have > 30% cover) 1 structure: points = 0
- If the unit has a Forested class, check if:*
- 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

0

H 1.2. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- Permanently flooded or inundated 4 or more types present: points = 3
- Seasonally flooded or inundated 3 types present: points = 2
- Occasionally flooded or inundated 2 types present: points = 1
- Saturated only 1 type present: points = 0
- Permanently flowing stream or river in, or adjacent to, the wetland
- Seasonally flowing stream in, or adjacent to, the wetland
- Lake Fringe wetland** **2 points**
- Freshwater tidal wetland** **2 points**

0

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft².

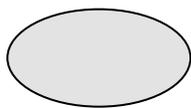
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

- If you counted: > 19 species points = 2
- 5 - 19 species points = 1
- < 5 species points = 0

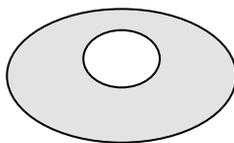
0

H 1.4. Interspersion of habitats

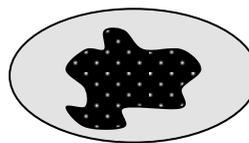
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



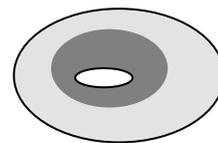
None = 0 points



Low = 1 point

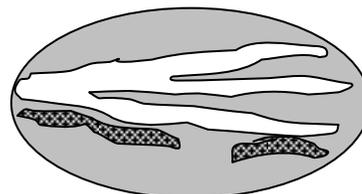
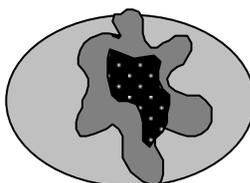
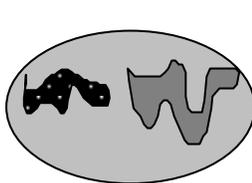


Moderate = 2 points



0

All three diagrams in this row are **HIGH** = 3points



Wetland name or number 1

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input type="checkbox"/> 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)</p> <p><input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>		0
Total for H 1	Add the points in the boxes above	0

Rating of Site Potential If score is: 15-18 = H 7-14 = M 0-6 = L *Record the rating on the first page*

H 2.0. Does the landscape have the potential to support the habitat functions of the site?		
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <u>20.67</u> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>		0
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.2"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <u>51.72499999999999</u> %</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>		0
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>		0
Total for H 2	Add the points in the boxes above	0

Rating of Landscape Potential If score is: 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

H 3.0. Is the habitat provided by the site valuable to society?		
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p>— It has 3 or more priority habitats within 100 m (see next page)</p> <p>— It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p>— It is mapped as a location for an individual WDFW priority species</p> <p>— It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p>— 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</p> <p>× Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>		1

Rating of Value If score is: 2 = H 1 = M 0 = L *Record the rating on the first page*

Wetland name or number 1

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

Wetland name or number 1

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt <input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25) <input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. <input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? <input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf <input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4 NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

Wetland name or number 1

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none">— Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none">— The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none">— The wetland is relatively undisturbed (has 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 ¾ 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 1/10 ac (4350 ft²) <p><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none">— Long Beach Peninsula: Lands west of SR 103— Grayland-Westport: Lands west of SR 105— Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Wetland name or number 2

RATING SUMMARY – Western Washington

Name of wetland (or ID #): 2 Date of site visit: 04/14/21
 Rated by Lauren Templeton, Rachael Hyland Trained by Ecology? Yes No Date of training 3/2021
 HGM Class used for rating Slope Wetland has multiple HGM classes? Y N

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

OVERALL WETLAND CATEGORY IV (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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	L	L	L	
Landscape Potential	L	L	M	
Value	H	M	M	TOTAL
Score Based on Ratings	5	4	5	14

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number 2

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number 2

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number 2

SLOPE WETLANDS

Water Quality Functions - Indicators that the site functions 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: <i>(a 1% slope has a 1 ft vertical drop in elevation for every 100 ft of horizontal distance)</i>		
Slope is 1% or less	points = 3	1
Slope is > 1%-2%	points = 2	
Slope is > 2%-5%	points = 1	
Slope is greater than 5%	points = 0	
S 1.2. <u>The soil 2 in below the surface (or duff layer)</u> is true clay or true organic <i>(use NRCS definitions)</i> : Yes = 3 No = 0		0
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollutants: Choose the points appropriate for the description that best fits the plants in the wetland. <i>Dense means you have trouble seeing the soil surface (>75% cover), and uncut means not grazed or mowed and plants are higher than 6 in.</i>		
Dense, uncut, herbaceous plants > 90% of the wetland area	points = 6	3
Dense, uncut, herbaceous plants > ½ of area	points = 3	
Dense, woody, plants > ½ of area	points = 2	
Dense, uncut, herbaceous plants > ¼ of area	points = 1	
Does not meet any of the criteria above for plants	points = 0	
Total for S 1	Add the points in the boxes above	4

Rating of Site Potential If score is: 12 = H 6-11 = M X 0-5 = L

Record the rating on the first page

S 2.0. Does the landscape have the potential to support the water quality function of the site?		
S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in land uses that generate pollutants?	Yes = 1 No = 0	0
S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other sources _____	Yes = 1 No = 0	0
Total for S 2	Add the points in the boxes above	0

Rating of Landscape Potential If score is: 1-2 = M X 0 = L

Record the rating on the first page

S 3.0. Is the water quality improvement provided by the site valuable to society?		
S 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 = 0	0
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? <i>At least one aquatic resource in the basin is on the 303(d) list.</i>	Yes = 1 No = 0	0
S 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? <i>Answer YES if there is a TMDL for the basin in which unit is found.</i>	Yes = 2 No = 0	2
Total for S 3	Add the points in the boxes above	2

Rating of Value If score is: X 2-4 = H 1 = M 0 = L

Record the rating on the first page

Wetland name or number 2

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: *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 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
 - Emergent 3 structures: points = 2
 - Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1
 - Forested (areas where trees have > 30% cover) 1 structure: points = 0
- If the unit has a Forested class, check if:*
- 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

0

H 1.2. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- Permanently flooded or inundated 4 or more types present: points = 3
- Seasonally flooded or inundated 3 types present: points = 2
- Occasionally flooded or inundated 2 types present: points = 1
- Saturated only 1 type present: points = 0
- Permanently flowing stream or river in, or adjacent to, the wetland
- Seasonally flowing stream in, or adjacent to, the wetland
- Lake Fringe wetland** **2 points**
- Freshwater tidal wetland** **2 points**

0

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft².

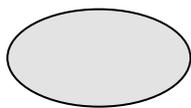
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

- If you counted: > 19 species points = 2
- 5 - 19 species points = 1
- < 5 species points = 0

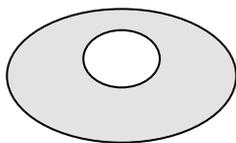
1

H 1.4. Interspersion of habitats

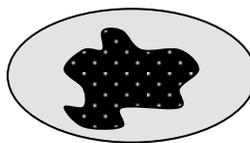
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



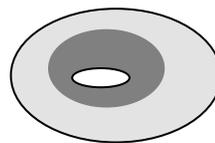
None = 0 points



Low = 1 point

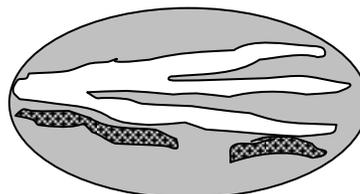
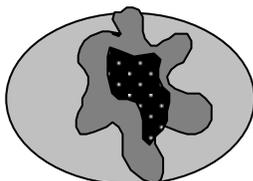
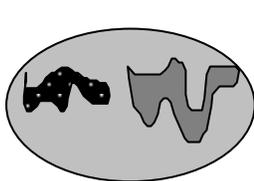


Moderate = 2 points



0

All three diagrams in this row are **HIGH** = 3points



Wetland name or number 2

<p>H 1.5. Special habitat features: Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i> <input type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long). <input type="checkbox"/> Standing snags (dbh > 4 in) within the wetland <input type="checkbox"/> 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) <input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>) <input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>) <input type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>	0
<p>Total for H 1</p>	<p>Add the points in the boxes above</p> <p>1</p>

Rating of Site Potential If score is: 15-18 = H 7-14 = M 0-6 = L *Record the rating on the first page*

<p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>	
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>). Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <input type="text" value="20.67"/> % If total accessible habitat is: > 1/3 (33.3%) of 1 km Polygon points = 3 20-33% of 1 km Polygon points = 2 10-19% of 1 km Polygon points = 1 < 10% of 1 km Polygon points = 0</p>	2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. Calculate: <input type="text" value="29.20"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <input type="text" value="51.72499999999999"/> % Undisturbed habitat > 50% of Polygon points = 3 Undisturbed habitat 10-50% and in 1-3 patches points = 2 Undisturbed habitat 10-50% and > 3 patches points = 1 Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	1
<p>H 2.3. Land use intensity in 1 km Polygon: If > 50% of 1 km Polygon is high intensity land use points = (- 2) ≤ 50% of 1 km Polygon is high intensity points = 0</p>	0
<p>Total for H 2</p>	<p>Add the points in the boxes above</p> <p>3</p>

Rating of Landscape Potential If score is: 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

<p>H 3.0. Is the habitat provided by the site valuable to society?</p>	
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i> Site meets ANY of the following criteria: points = 2 <input type="checkbox"/> It has 3 or more priority habitats within 100 m (see next page) <input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists) <input type="checkbox"/> It is mapped as a location for an individual WDFW priority species <input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources <input type="checkbox"/> 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 <input checked="" type="checkbox"/> Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1 Site does not meet any of the criteria above points = 0</p>	1

Rating of Value If score is: 2 = H 1 = M 0 = L *Record the rating on the first page*

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt <input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25) <input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland. <input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? <input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf <input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4 NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has 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 ¾ 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 1/10 ac (4350 ft²) <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Wetland name or number 3

RATING SUMMARY – Western Washington

Name of wetland (or ID #): 3 Date of site visit: 11/2023
 Rated by Casey Lanier, Garret Jordan Trained by Ecology? Yes No Date of training 12/2021
 HGM Class used for rating Depressional Wetland has multiple HGM classes? Y N

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

OVERALL WETLAND CATEGORY II (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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	L	L	L	
Landscape Potential	H	H	H	
Value	H	M	H	TOTAL
Score Based on Ratings	7	6	7	20

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number 3

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number 3

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number 3

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?	
D 1.1. <u>Characteristics of surface water outflows from the wetland:</u> Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. 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.	points = 3 points = 2 points = 1 points = 1
D 1.2. <u>The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions).</u> Yes = 4 No = 0	0
D 1.3. <u>Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes):</u> Wetland has persistent, ungrazed, plants > 95% of area Wetland has persistent, ungrazed, plants > ½ of area Wetland has persistent, ungrazed plants > 1/10 of area Wetland has persistent, ungrazed plants < 1/10 of area	points = 5 points = 3 points = 1 points = 0
D 1.4. <u>Characteristics of seasonal ponding or inundation:</u> <i>This is the area that is ponded for at least 2 months. See description in manual.</i> Area seasonally ponded is > ½ total area of wetland Area seasonally ponded is > ¼ total area of wetland Area seasonally ponded is < ¼ total area of wetland	points = 4 points = 2 points = 0
Total for D 1	Add the points in the boxes above 4

Rating of Site Potential If score is: 12-16 = H 6-11 = M X 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?	
D 2.1. Does the wetland unit receive stormwater discharges?	Yes = 1 No = 0 1
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants?	Yes = 1 No = 0 1
D 2.3. Are there septic systems within 250 ft of the wetland?	Yes = 1 No = 0 1
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 _____	Yes = 1 No = 0 0
Total for D 2	Add the points in the boxes above 3

Rating of Landscape Potential If score is: X 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 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 = 0 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
D 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 basin in which the unit is found)?	Yes = 2 No = 0 2
Total for D 3	Add the points in the boxes above 2

Rating of Value If score is: X 2-4 = H 1 = M 0 = L Record the rating on the first page

NOTES and FIELD OBSERVATIONS:

Wetland name or number 3

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. Characteristics of surface water outflows from the wetland:		
Wetland is a depression or flat depression with no surface water leaving it (no outlet)	points = 4	0
Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet	points = 2	
Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch	points = 1	
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	
D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part.		
Marks of ponding are 3 ft or more above the surface or bottom of outlet	points = 7	0
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 "headwater" wetland	points = 3	
Wetland is flat but has small depressions on the surface that trap water	points = 1	
Marks of ponding less than 0.5 ft (6 in)	points = 0	
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 less than 10 times the area of the unit	points = 5	3
The area of the basin is 10 to 100 times the area of the unit	points = 3	
The area of the basin is more than 100 times the area of the unit	points = 0	
Entire wetland is in the Flats class	points = 5	
Total for D 4	Add the points in the boxes above	3

Rating of Site Potential If score is: 12-16 = H 6-11 = M X 0-5 = L Record the rating on the 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?	Yes = 1 No = 0	1
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	1
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)?	Yes = 1 No = 0	1
Total for D 5	Add the points in the boxes above	3

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

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 around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met.		
The wetland 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):		1
• Flooding occurs in a sub-basin that is immediately down-gradient of unit.	points = 2	
• Surface flooding problems are in a sub-basin farther down-gradient.	points = 1	
Flooding from groundwater is an issue in the sub-basin.	points = 1	
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 _____	points = 0	
There are no problems with flooding downstream of the wetland.	points = 0	
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 = 0	0
Total for D 6	Add the points in the boxes above	1

Rating of Value If score is: 2-4 = H X 1 = M 0 = L Record the rating on the first page

Wetland name or number 3

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: *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 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
 - Emergent 3 structures: points = 2
 - Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1
 - Forested (areas where trees have > 30% cover) 1 structure: points = 0
- If the unit has a Forested class, check if:*
- 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

1

H 1.2. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- Permanently flooded or inundated 4 or more types present: points = 3
- Seasonally flooded or inundated 3 types present: points = 2
- Occasionally flooded or inundated 2 types present: points = 1
- Saturated only 1 type present: points = 0
- Permanently flowing stream or river in, or adjacent to, the wetland
- Seasonally flowing stream in, or adjacent to, the wetland
- Lake Fringe wetland** **2 points**
- Freshwater tidal wetland** **2 points**

1

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft².

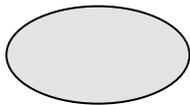
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

- If you counted: > 19 species points = 2
- 5 - 19 species points = 1
- < 5 species points = 0

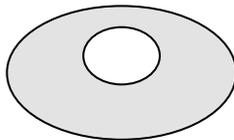
1

H 1.4. Interspersion of habitats

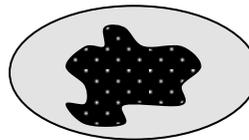
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



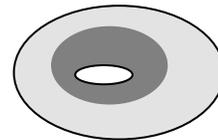
None = 0 points



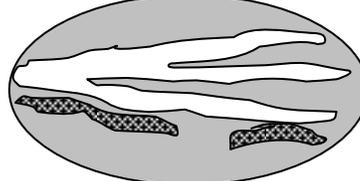
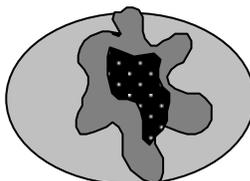
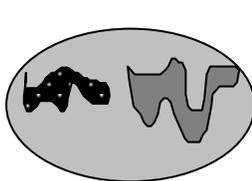
Low = 1 point



Moderate = 2 points



All three diagrams in this row are **HIGH** = 3points



1

Wetland name or number 3

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input checked="" type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input checked="" type="checkbox"/> 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)</p> <p><input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>	2
<p>Total for H 1</p>	6

Rating of Site Potential If score is: 15-18 = H 7-14 = M X 0-6 = L *Record the rating on the first page*

<p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>	
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <input type="text" value="20.67"/> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>	2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.2"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <input type="text" value="51.72499999999999"/> %</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>	0
<p>Total for H 2</p>	5

Rating of Landscape Potential If score is: X 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

<p>H 3.0. Is the habitat provided by the site valuable to society?</p>	
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p><input checked="" type="checkbox"/> It has 3 or more priority habitats within 100 m (see next page)</p> <p><input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p><input type="checkbox"/> It is mapped as a location for an individual WDFW priority species</p> <p><input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p><input type="checkbox"/> 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</p> <p>Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>	2

Rating of Value If score is: X 2 = H 1 = M 0 = L *Record the rating on the first page*

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt <input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25) <input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. <input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? <input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf <input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4 NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has 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 ¾ 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 1/10 ac (4350 ft²) <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Wetland name or number 4

RATING SUMMARY – Western Washington

Name of wetland (or ID #): 4 Date of site visit: 11/2023
 Rated by Rachael Hyland, Amanda Smith Trained by Ecology? Yes No Date of training 3/2019
 HGM Class used for rating Depressional Wetland has multiple HGM classes? Y N

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

OVERALL WETLAND CATEGORY III (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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	L	L	L	
Landscape Potential	M	M	H	
Value	H	M	M	TOTAL
Score Based on Ratings	6	5	6	17

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number 4

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number 4

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number 4

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?	
D 1.1. <u>Characteristics of surface water outflows from the wetland:</u> Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. 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.	points = 3 points = 2 points = 1 points = 1
D 1.2. <u>The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions).</u> Yes = 4 No = 0	0
D 1.3. <u>Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes):</u> Wetland 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	points = 5 points = 3 points = 1 points = 0
D 1.4. <u>Characteristics of seasonal ponding or inundation:</u> <i>This is the area that is ponded for at least 2 months. See description in manual.</i> Area seasonally ponded is > 1/2 total area of wetland Area seasonally ponded is > 1/4 total area of wetland Area seasonally ponded is < 1/4 total area of wetland	points = 4 points = 2 points = 0
Total for D 1	Add the points in the boxes above 1

Rating of Site Potential If score is: 12-16 = H 6-11 = M X 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?	
D 2.1. Does the wetland unit receive stormwater discharges?	Yes = 1 No = 0
D 2.2. Is > 10% of the area within 150 ft of the wetland 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
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 _____	Yes = 1 No = 0
Total for D 2	Add the points in the boxes above 2

Rating of Landscape Potential If score is: 3 or 4 = H X 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 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 = 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
D 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 basin in which the unit is found)?	Yes = 2 No = 0
Total for D 3	Add the points in the boxes above 2

Rating of Value If score is: X 2-4 = H 1 = M 0 = L Record the rating on the first page

NOTES and FIELD OBSERVATIONS:

Wetland name or number 4

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. Characteristics of surface water outflows from the wetland:		
Wetland is a depression or flat depression with no surface water leaving it (no outlet)	points = 4	0
Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet	points = 2	
Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch	points = 1	
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	
D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part.		
Marks of ponding are 3 ft or more above the surface or bottom of outlet	points = 7	0
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 "headwater" wetland	points = 3	
Wetland is flat but has small depressions on the surface that trap water	points = 1	
Marks of ponding less than 0.5 ft (6 in)	points = 0	
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 less than 10 times the area of the unit	points = 5	0
The area of the basin is 10 to 100 times the area of the unit	points = 3	
The area of the basin is more than 100 times the area of the unit	points = 0	
Entire wetland is in the Flats class	points = 5	
Total for D 4	Add the points in the boxes above	0

Rating of Site Potential If score is: 12-16 = H 6-11 = M X 0-5 = L Record the rating on the 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?	Yes = 1 No = 0	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	1
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)?	Yes = 1 No = 0	0
Total for D 5	Add the points in the boxes above	1

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

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 around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met.		
The wetland 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):		1
• Flooding occurs in a sub-basin that is immediately down-gradient of unit.	points = 2	
• Surface flooding problems are in a sub-basin farther down-gradient.	points = 1	
Flooding from groundwater is an issue in the sub-basin.	points = 1	
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 _____	points = 0	
There are no problems with flooding downstream of the wetland.	points = 0	
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 = 0	0
Total for D 6	Add the points in the boxes above	1

Rating of Value If score is: 2-4 = H X 1 = M 0 = L Record the rating on the first page

Wetland name or number 4

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: *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 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
 - Emergent 3 structures: points = 2
 - Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1
 - Forested (areas where trees have > 30% cover) 1 structure: points = 0
- If the unit has a Forested class, check if:*
- 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

0

H 1.2. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- Permanently flooded or inundated 4 or more types present: points = 3
- Seasonally flooded or inundated 3 types present: points = 2
- Occasionally flooded or inundated 2 types present: points = 1
- Saturated only 1 type present: points = 0
- Permanently flowing stream or river in, or adjacent to, the wetland
- Seasonally flowing stream in, or adjacent to, the wetland
- Lake Fringe wetland** **2 points**
- Freshwater tidal wetland** **2 points**

0

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft².

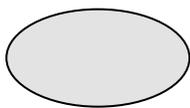
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

- If you counted: > 19 species points = 2
- 5 - 19 species points = 1
- < 5 species points = 0

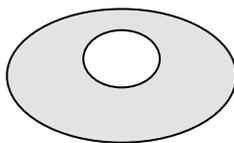
1

H 1.4. Interspersion of habitats

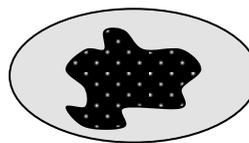
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



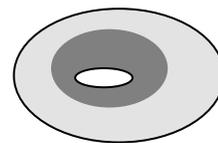
None = 0 points



Low = 1 point

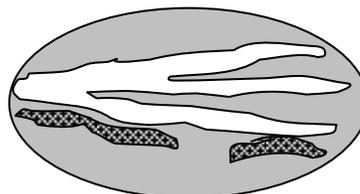
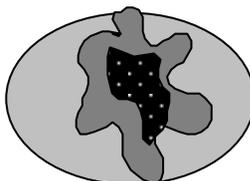
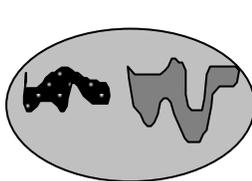


Moderate = 2 points



0

All three diagrams in this row are **HIGH** = 3points



Wetland name or number 4

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input type="checkbox"/> 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)</p> <p><input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>	0
<p>Total for H 1</p>	<p>Add the points in the boxes above</p> <p>1</p>

Rating of Site Potential If score is: 15-18 = H 7-14 = M X 0-6 = L *Record the rating on the first page*

<p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>	
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <u>20.67</u> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>	2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.2"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <u>51.72499999999999</u> %</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>	0
<p>Total for H 2</p>	<p>Add the points in the boxes above</p> <p>5</p>

Rating of Landscape Potential If score is: X 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

<p>H 3.0. Is the habitat provided by the site valuable to society?</p>	
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p>— It has 3 or more priority habitats within 100 m (see next page)</p> <p>— It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p>— It is mapped as a location for an individual WDFW priority species</p> <p>— It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p>— 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</p> <p>× Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>	1

Rating of Value If score is: 2 = H X 1 = M 0 = L *Record the rating on the first page*

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

Wetland name or number 4

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt</p> <p style="text-align: right;"><input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25)</p> <p><input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland.</p> <p><input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwtlands.pdf</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond?</p> <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4</p> <p>NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy?</p> <p style="text-align: right;"><input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

Wetland name or number 4

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has 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 ¾ 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 1/10 ac (4350 ft²) <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Wetland name or number 5

RATING SUMMARY – Western Washington

Name of wetland (or ID #): 5 Date of site visit: 11/15/23
 Rated by Rachael Hyland, Amanda Smith Trained by Ecology? Yes No Date of training 3/2019
 HGM Class used for rating Slope Wetland has multiple HGM classes? Y N

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

OVERALL WETLAND CATEGORY III (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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	L	L	L	
Landscape Potential	L	L	H	
Value	H	M	H	TOTAL
Score Based on Ratings	5	4	7	16

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number 5

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number 5

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number 5

SLOPE WETLANDS

Water Quality Functions - Indicators that the site functions 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: <i>(a 1% slope has a 1 ft vertical drop in elevation for every 100 ft of horizontal distance)</i>		0
Slope is 1% or less	points = 3	
Slope is > 1%-2%	points = 2	
Slope is > 2%-5%	points = 1	
Slope is greater than 5%	points = 0	
S 1.2. <u>The soil 2 in below the surface (or duff layer)</u> is true clay or true organic <i>(use NRCS definitions)</i> : Yes = 3 No = 0		0
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollutants: Choose the points appropriate for the description that best fits the plants in the wetland. <i>Dense means you have trouble seeing the soil surface (>75% cover), and uncut means not grazed or mowed and plants are higher than 6 in.</i>		2
Dense, uncut, herbaceous plants > 90% of the wetland area	points = 6	
Dense, uncut, herbaceous plants > ½ of area	points = 3	
Dense, woody, plants > ½ of area	points = 2	
Dense, uncut, herbaceous plants > ¼ of area	points = 1	
Does not meet any of the criteria above for plants	points = 0	
Total for S 1		2

Rating of Site Potential If score is: 12 = H 6-11 = M X 0-5 = L

Record the rating on the first page

S 2.0. Does the landscape have the potential to support the water quality function of the site?		
S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in land uses that generate pollutants?	Yes = 1 No = 0	0
S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other sources _____ Yes = 1 No = 0		0
Total for S 2		0

Rating of Landscape Potential If score is: 1-2 = M X 0 = L

Record the rating on the first page

S 3.0. Is the water quality improvement provided by the site valuable to society?		
S 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 = 0	0
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? <i>At least one aquatic resource in the basin is on the 303(d) list.</i>		0
S 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? <i>Answer YES if there is a TMDL for the basin in which unit is found.</i>		2
Total for S 3		2

Rating of Value If score is: X 2-4 = H 1 = M 0 = L

Record the rating on the first page

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: *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 ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.*

- | | | |
|---|----------------------------------|---|
| <input type="checkbox"/> Aquatic bed | 4 structures or more: points = 4 | 1 |
| <input type="checkbox"/> Emergent | 3 structures: points = 2 | |
| <input checked="" type="checkbox"/> Scrub-shrub (areas where shrubs have > 30% cover) | 2 structures: points = 1 | |
| <input checked="" type="checkbox"/> Forested (areas where trees have > 30% cover) | 1 structure: points = 0 | |
| <i>If the unit has a Forested class, check if:</i> | | |
| <input type="checkbox"/> 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. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- | | | |
|--|-------------------------------------|---|
| <input type="checkbox"/> Permanently flooded or inundated | 4 or more types present: points = 3 | 0 |
| <input type="checkbox"/> Seasonally flooded or inundated | 3 types present: points = 2 | |
| <input type="checkbox"/> Occasionally flooded or inundated | 2 types present: points = 1 | |
| <input checked="" type="checkbox"/> Saturated only | 1 type present: points = 0 | |
| <input type="checkbox"/> Permanently flowing stream or river in, or adjacent to, the wetland | | |
| <input type="checkbox"/> Seasonally flowing stream in, or adjacent to, the wetland | | |
| <input type="checkbox"/> Lake Fringe wetland | 2 points | |
| <input type="checkbox"/> Freshwater tidal wetland | 2 points | |

H 1.3. Richness of plant species

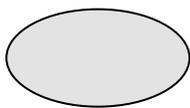
Count the number of plant species in the wetland that cover at least 10 ft².

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 milfoil, reed canarygrass, purple loosestrife, Canadian thistle

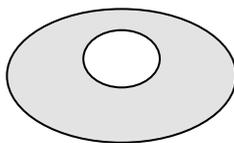
- | | | |
|------------------------------|------------|---|
| If you counted: > 19 species | points = 2 | 1 |
| 5 - 19 species | points = 1 | |
| < 5 species | points = 0 | |

H 1.4. Interspersion of habitats

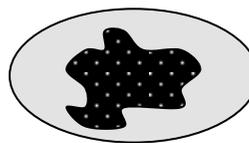
Decide from the diagrams below whether interspersions among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



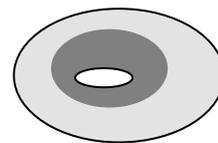
None = 0 points



Low = 1 point

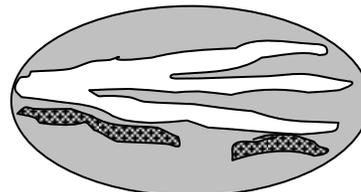
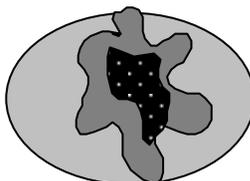
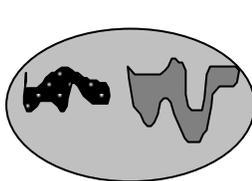


Moderate = 2 points



1

All three diagrams in this row are **HIGH** = 3points



Wetland name or number 5

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input checked="" type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input checked="" type="checkbox"/> 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)</p> <p><input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input checked="" type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>	3
<p>Total for H 1</p>	<p>Add the points in the boxes above</p> <p>6</p>

Rating of Site Potential If score is: 15-18 = H 7-14 = M X 0-6 = L *Record the rating on the first page*

<p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>	
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <u>20.67</u> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>	2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.2"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <u>51.72499999999999</u> %</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>	0
<p>Total for H 2</p>	<p>Add the points in the boxes above</p> <p>5</p>

Rating of Landscape Potential If score is: X 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

<p>H 3.0. Is the habitat provided by the site valuable to society?</p>	
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p><input checked="" type="checkbox"/> It has 3 or more priority habitats within 100 m (see next page)</p> <p><input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p><input type="checkbox"/> It is mapped as a location for an individual WDFW priority species</p> <p><input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p><input type="checkbox"/> 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</p> <p>Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>	2

Rating of Value If score is: X 2 = H 1 = M 0 = L *Record the rating on the first page*

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt <input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25) <input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland. <input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? <input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf <input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4 NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has 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 ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. — The wetland is larger than 1/10 ac (4350 ft²) <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Wetland name or number 6

RATING SUMMARY – Western Washington

Name of wetland (or ID #): 6 Date of site visit: 9/18/2024
 Rated by Casey Lanier Trained by Ecology? Yes No Date of training 12/2021
 HGM Class used for rating Depressional Wetland has multiple HGM classes? Y N

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

OVERALL WETLAND CATEGORY III (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

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	L	M	L	
Landscape Potential	M	L	H	
Value	H	M	M	TOTAL
Score Based on Ratings	6	5	6	17

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,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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number 6

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
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 polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
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 #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number 6

NO – 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

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**

7. 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 maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM 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 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 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 within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as 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.*

Wetland name or number 6

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?	
D 1.1. <u>Characteristics of surface water outflows from the wetland:</u> Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. 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.	points = 3 points = 2 points = 1 points = 1 3
D 1.2. <u>The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions).</u> Yes = 4 No = 0	0
D 1.3. <u>Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes):</u> Wetland has persistent, ungrazed, plants > 95% of area Wetland has persistent, ungrazed, plants > ½ of area Wetland has persistent, ungrazed plants > 1/10 of area Wetland has persistent, ungrazed plants < 1/10 of area	points = 5 points = 3 points = 1 points = 0 1
D 1.4. <u>Characteristics of seasonal ponding or inundation:</u> <i>This is the area that is ponded for at least 2 months. See description in manual.</i> Area seasonally ponded is > ½ total area of wetland Area seasonally ponded is > ¼ total area of wetland Area seasonally ponded is < ¼ total area of wetland	points = 4 points = 2 points = 0 0
Total for D 1	4 Add the points in the boxes above

Rating of Site Potential If score is: 12-16 = H 6-11 = M X 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?	
D 2.1. Does the wetland unit receive stormwater discharges?	Yes = 1 No = 0 0
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants?	Yes = 1 No = 0 0
D 2.3. Are there septic systems within 250 ft of the wetland?	Yes = 1 No = 0 1
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 _____	Yes = 1 No = 0 0
Total for D 2	1 Add the points in the boxes above

Rating of Landscape Potential If score is: 3 or 4 = H X 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 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 = 0 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
D 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 basin in which the unit is found)?	Yes = 2 No = 0 2
Total for D 3	2 Add the points in the boxes above

Rating of Value If score is: X 2-4 = H 1 = M 0 = L Record the rating on the first page

NOTES and FIELD OBSERVATIONS:

Wetland name or number 6

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. Characteristics of surface water outflows from the wetland:		
Wetland is a depression or flat depression with no surface water leaving it (no outlet)	points = 4	4
Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet	points = 2	
Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch	points = 1	
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	
D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part.		
Marks of ponding are 3 ft or more above the surface or bottom of outlet	points = 7	0
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 "headwater" wetland	points = 3	
Wetland is flat but has small depressions on the surface that trap water	points = 1	
Marks of ponding less than 0.5 ft (6 in)	points = 0	
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 less than 10 times the area of the unit	points = 5	3
The area of the basin is 10 to 100 times the area of the unit	points = 3	
The area of the basin is more than 100 times the area of the unit	points = 0	
Entire wetland is in the Flats class	points = 5	
Total for D 4	Add the points in the boxes above	7

Rating of Site Potential If score is: 12-16 = H X 6-11 = M 0-5 = L Record the rating on the 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?	Yes = 1 No = 0	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
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)?	Yes = 1 No = 0	0
Total for D 5	Add the points in the boxes above	0

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

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 around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met.		
The wetland 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):		1
• Flooding occurs in a sub-basin that is immediately down-gradient of unit.	points = 2	
• Surface flooding problems are in a sub-basin farther down-gradient.	points = 1	
Flooding from groundwater is an issue in the sub-basin.	points = 1	
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 _____	points = 0	
There are no problems with flooding downstream of the wetland.	points = 0	
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 = 0	0
Total for D 6	Add the points in the boxes above	1

Rating of Value If score is: 2-4 = H X 1 = M 0 = L Record the rating on the first page

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: *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 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
 - Emergent 3 structures: points = 2
 - Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1
 - Forested (areas where trees have > 30% cover) 1 structure: points = 0
- If the unit has a Forested class, check if:*
- 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

0

H 1.2. 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 ¼ ac to count (*see text for descriptions of hydroperiods*).

- Permanently flooded or inundated 4 or more types present: points = 3
- Seasonally flooded or inundated 3 types present: points = 2
- Occasionally flooded or inundated 2 types present: points = 1
- Saturated only 1 type present: points = 0
- Permanently flowing stream or river in, or adjacent to, the wetland
- Seasonally flowing stream in, or adjacent to, the wetland
- Lake Fringe wetland** **2 points**
- Freshwater tidal wetland** **2 points**

0

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft².

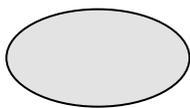
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

- If you counted: > 19 species points = 2
- 5 - 19 species points = 1
- < 5 species points = 0

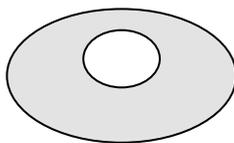
1

H 1.4. Interspersion of habitats

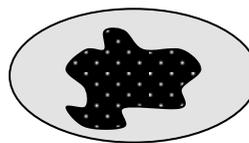
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



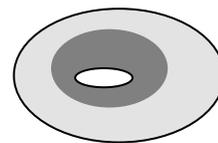
None = 0 points



Low = 1 point

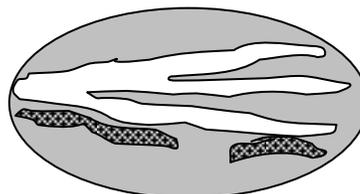
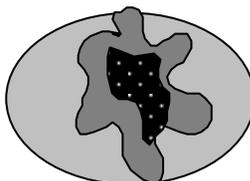
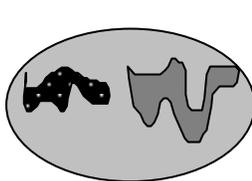


Moderate = 2 points



0

All three diagrams in this row are **HIGH** = 3points



Wetland name or number 6

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input checked="" type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input type="checkbox"/> 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)</p> <p><input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>	1
<p>Total for H 1</p>	<p>Add the points in the boxes above</p> <p>2</p>

Rating of Site Potential If score is: 15-18 = H 7-14 = M X 0-6 = L *Record the rating on the first page*

<p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>	
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <input type="text" value="13.58"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="14.18"/> /2] = <input type="text" value="20.67"/> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>	2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <input type="text" value="29.20"/> % undisturbed habitat + [(% moderate and low intensity land uses) <input type="text" value="45.05"/> /2] = <input type="text" value="51.72499999999999"/> %</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>	0
<p>Total for H 2</p>	<p>Add the points in the boxes above</p> <p>5</p>

Rating of Landscape Potential If score is: X 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

<p>H 3.0. Is the habitat provided by the site valuable to society?</p>	
<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p>Site meets ANY of the following criteria: points = 2</p> <p>— It has 3 or more priority habitats within 100 m (see next page)</p> <p>— It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p>— It is mapped as a location for an individual WDFW priority species</p> <p>— It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p>— 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</p> <p><input checked="" type="checkbox"/> Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1</p> <p>Site does not meet any of the criteria above points = 0</p>	1

Rating of Value If score is: 2 = H X 1 = M 0 = L *Record the rating on the first page*

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/publications/00165/wdfw00165.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 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 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-growth west of Cascade 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) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; 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/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:** Herbaceous, non-forested 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. (*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 basalt, andesite, and/or sedimentary rock, including riprap slides 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 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 elsewhere.

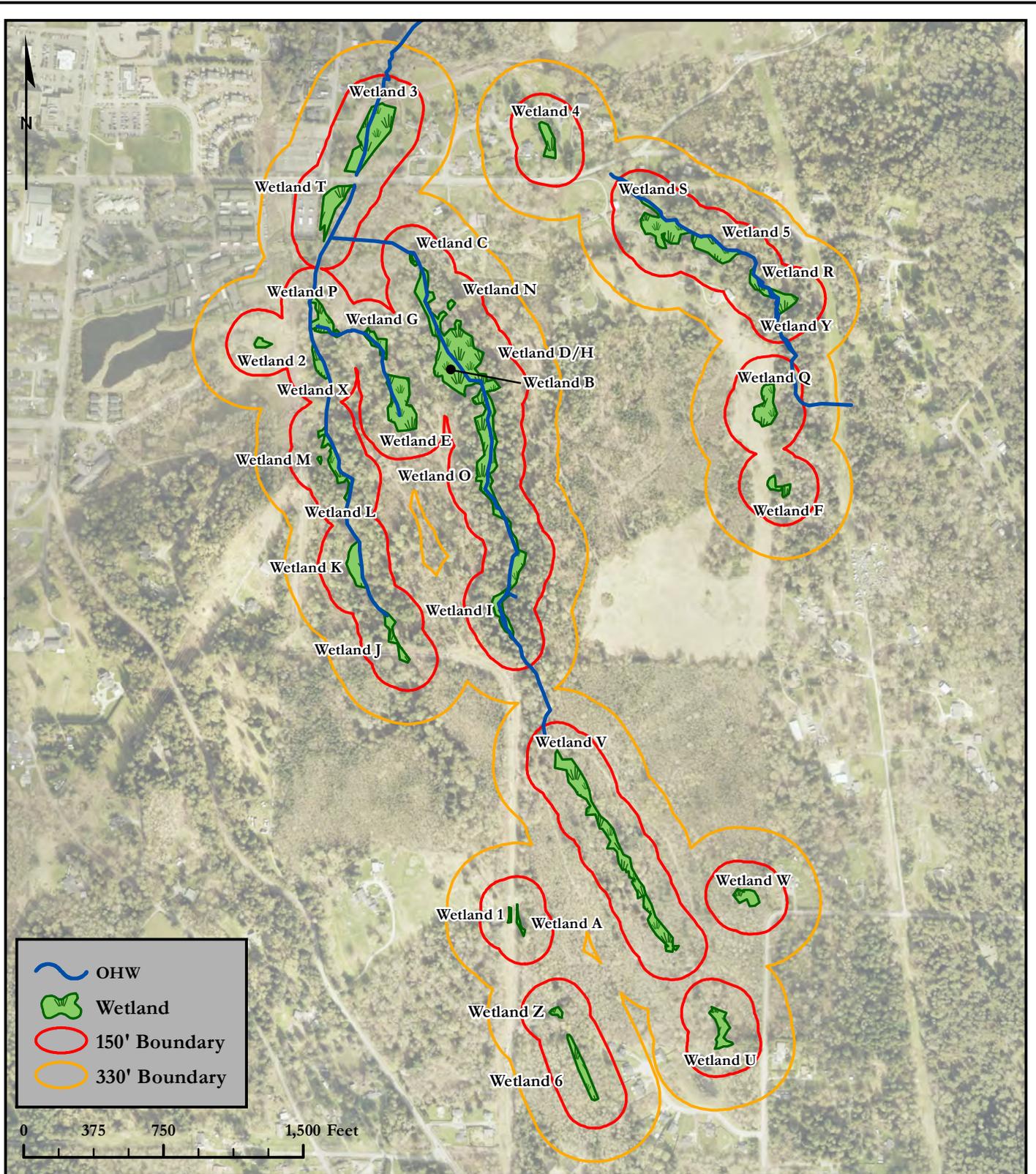
CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt <input type="checkbox"/> Yes –Go to SC 1.1 <input checked="" type="checkbox"/> No= Not an estuarine wetland</p>	
<p>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 designated under WAC 332-30-151? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No - Go to SC 1.2</p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p><input type="checkbox"/> 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 <i>Spartina</i>, see page 25) <input type="checkbox"/> At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland. <input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? <input type="checkbox"/> Yes – Go to SC 2.2 <input checked="" type="checkbox"/> No – Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf <input type="checkbox"/> Yes – Contact WNHP/WDNR and go to SC 2.4 <input checked="" type="checkbox"/> No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? <input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a WHCV</p>	
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>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? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No – Go to SC 3.2</p> <p>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 bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? <input type="checkbox"/> Yes – Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No – Go to SC 3.4 NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that 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 plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, 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 provide more than 30% of the cover under the canopy? <input type="checkbox"/> Yes = Is a Category I bog <input type="checkbox"/> No = Is not a bog</p>	

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): 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 (dbh) of 32 in (81 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 (dbh) exceeding 21 in (53 cm). <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland 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 ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has 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 ¾ 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 1/10 ac (4350 ft²) <p style="text-align: right;"><input type="checkbox"/> Yes = Category I <input type="checkbox"/> No = Category II</p>	
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p style="text-align: right;"><input type="checkbox"/> Yes – Go to SC 6.1 <input checked="" type="checkbox"/> No = not an interdunal wetland for rating</p> <p>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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> No – Go to SC 6.3</p> <p>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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	

Attachment F – Wetland Rating Figures

BOUNDARY MAP



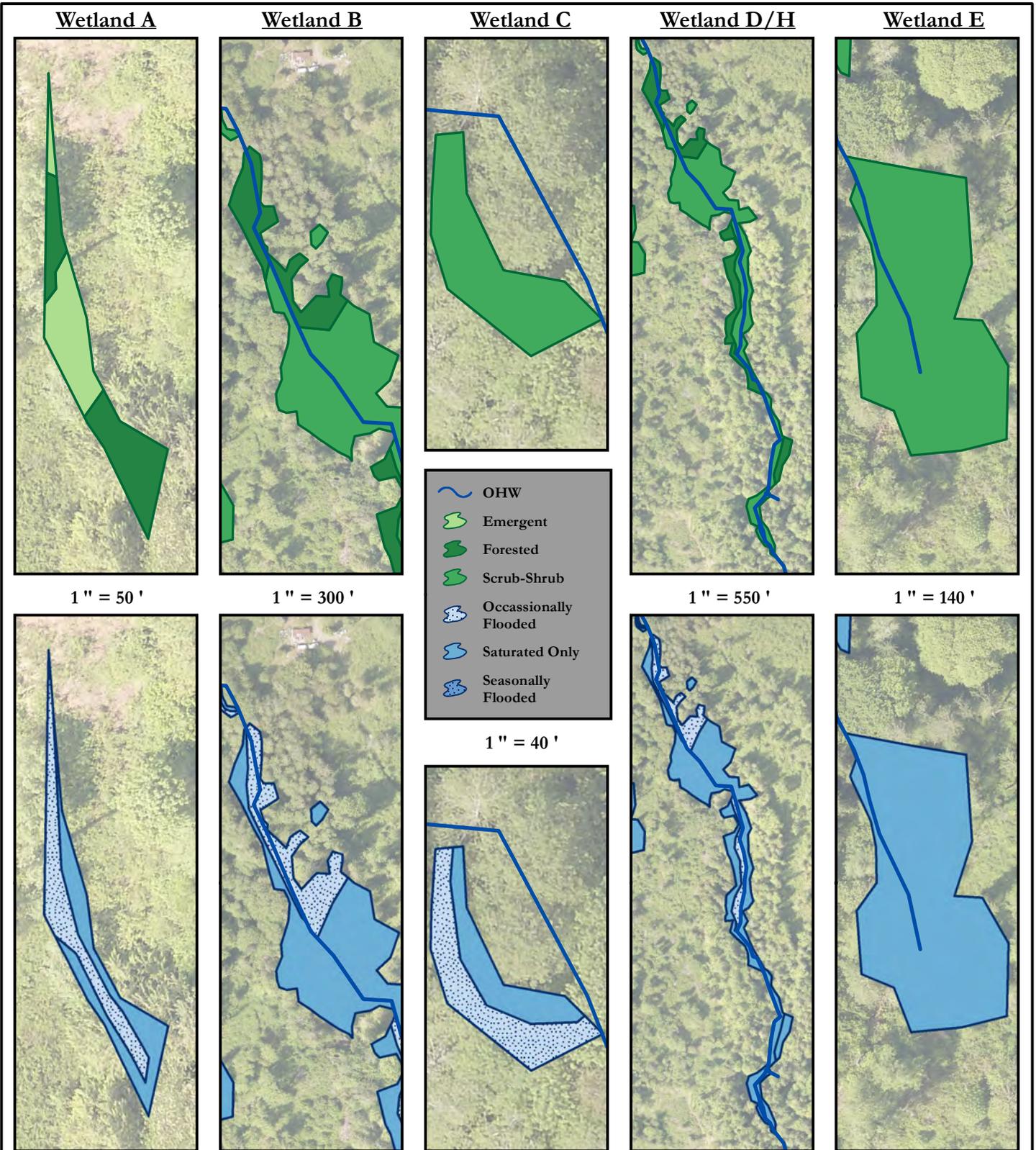

Soundview Consultants LLC
 Environmental Assessment • Planning • Land Use Solutions
 2907 Harborview Dr., Suite D, Gig Harbor, WA 98335
 Phone: (253) 514-8952 Fax: (253) 514-8954
www.soundviewconsultants.com

9104, 9110, 9116 & 8904 TVEIT ROAD
 ARLINGTON, WA 98223

SNOHOMISH COUNTY PARCEL NUMBERS:
 31051200400200, 31051200401000, 31050200402300,
 31051200400400, 31051300100200, 3105300100300,
 31051200300100 & 31051200300500

DATE: 10/30/2024
JOB: 2376.0008
BY: DS
SCALE: 1" = 750'
FIGURE NO. 1

COWARDIN & HYDROPERIOD MAP



Soundview Consultants LLC
 Environmental Assessment • Planning • Land Use Solutions
 2907 Harborview Dr., Suite D, Gig Harbor, WA 98335
 Phone: (253) 514-8952 Fax: (253) 514-8954
www.soundviewconsultants.com

9104, 9110, 9116 & 8904 TVEIT ROAD
 ARLINGTON, WA 98223

SNOHOMISH COUNTY PARCEL NUMBERS:
 31051200400200, 31051200401000, 31050200402300,
 31051200400400, 31051300100200, 3105300100300,
 31051200300100 & 31051200300500

DATE: 10/30/2024

JOB: 2376.0008

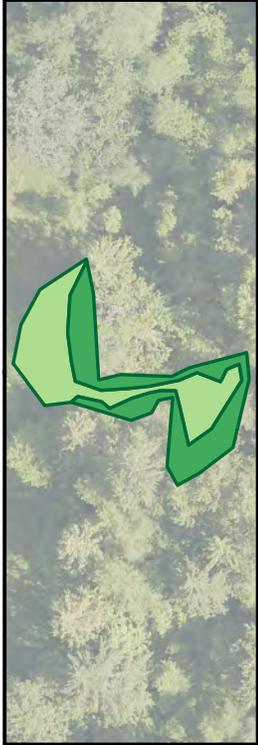
BY: DS

SCALE: SEE MAP
 FRAME

FIGURE NO. 2

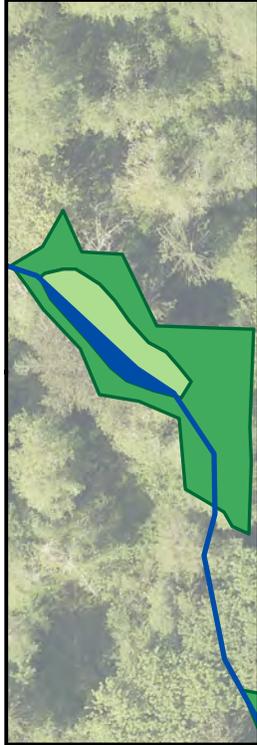
COWARDIN & HYDROPERIOD MAP

Wetland F



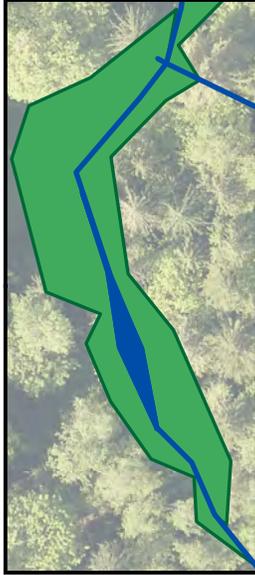
1" = 100'

Wetland G



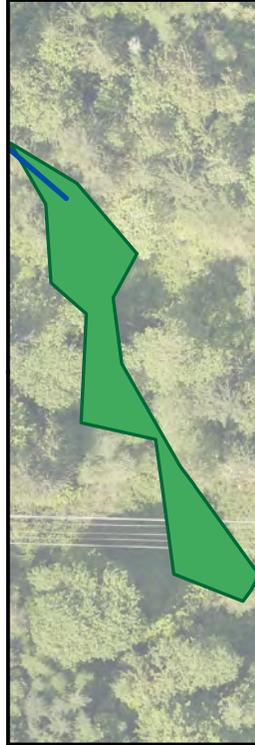
1" = 100'

Wetland I



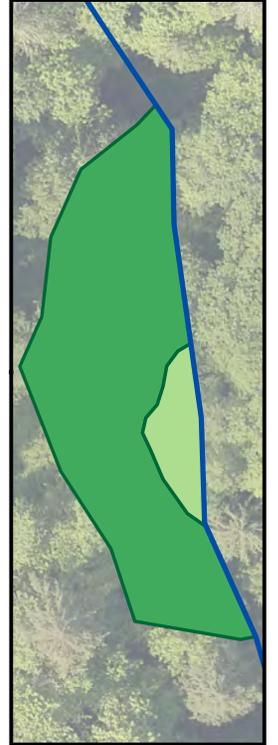
1" = 100'

Wetland J

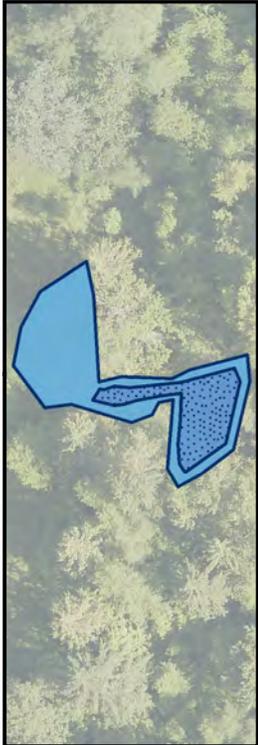


1" = 120'

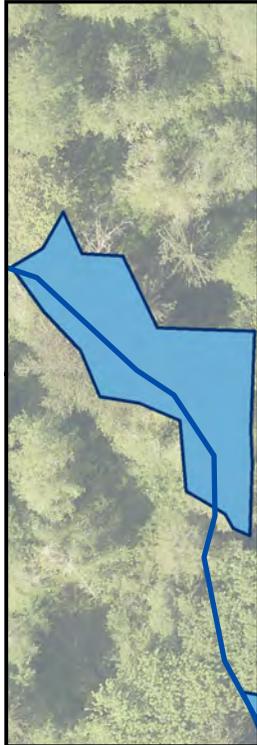
Wetland K



1" = 90'



1" = 100'



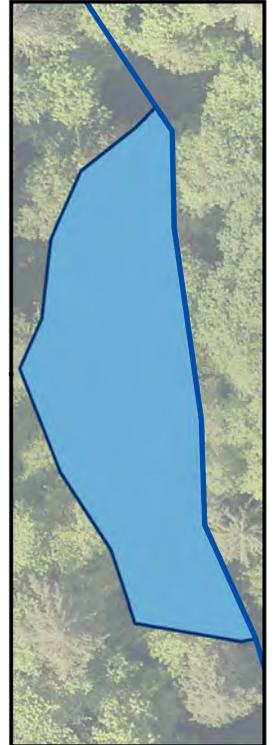
1" = 100'



1" = 100'



1" = 120'



1" = 90'



Soundview Consultants LLC
 Environmental Assessment • Planning • Land Use Solutions
 2907 Harborview Dr., Suite D, Gig Harbor, WA 98335
 Phone: (253) 514-8952 Fax: (253) 514-8954
www.soundviewconsultants.com

9104, 9110, 9116 & 8904 TVEIT ROAD
 ARLINGTON, WA 98223

SNOHOMISH COUNTY PARCEL NUMBERS:
 31051200400200, 31051200401000, 31050200402300,
 31051200400400, 31051300100200, 3105300100300,
 31051200300100 & 31051200300500

DATE: 10/30/2024

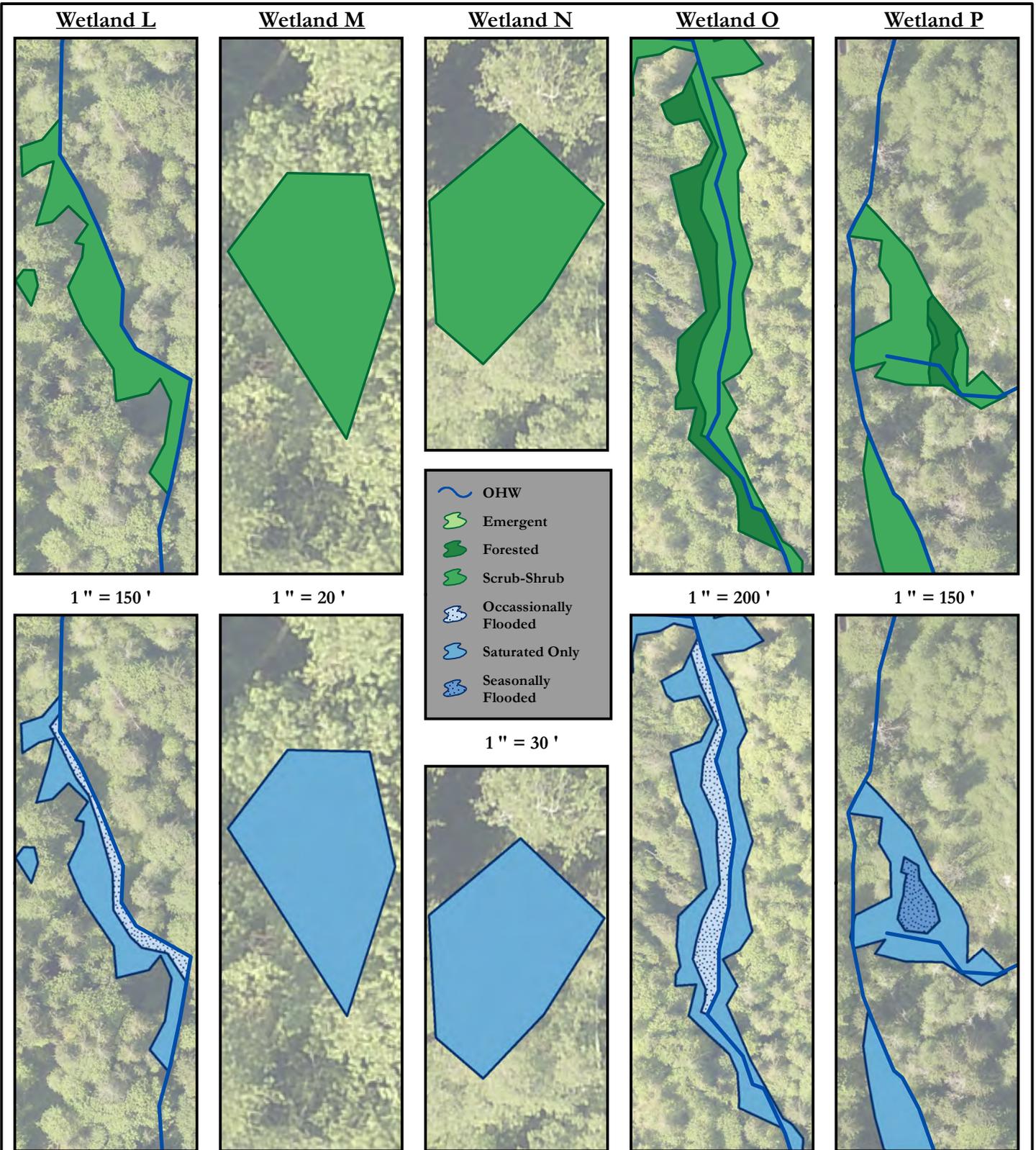
JOB: 2376.0008

BY: DS

SCALE: SEE MAP
 FRAME

FIGURE NO. 3

COWARDIN & HYDROPERIOD MAP




Soundview Consultants LLC
 Environmental Assessment • Planning • Land Use Solutions
 2907 Harborview Dr., Suite D, Gig Harbor, WA 98335
 Phone: (253) 514-8952 Fax: (253) 514-8954
www.soundviewconsultants.com

9104, 9110, 9116 & 8904 TVEIT ROAD
 ARLINGTON, WA 98223

SNOHOMISH COUNTY PARCEL NUMBERS:
 31051200400200, 31051200401000, 31050200402300,
 31051200400400, 31051300100200, 3105300100300,
 31051200300100 & 31051200300500

DATE: 10/30/2024
JOB: 2376.0008
BY: DS
SCALE: SEE MAP FRAME
FIGURE NO. 4

COWARDIN & HYDROPERIOD MAP

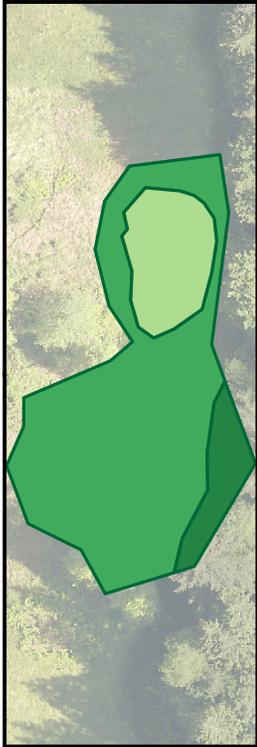
Wetland Q

Wetland R

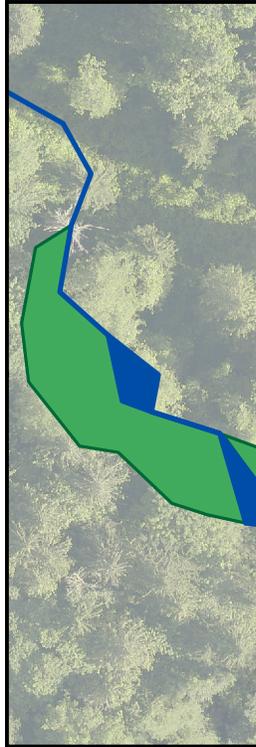
Wetland S

Wetland T

Wetland U



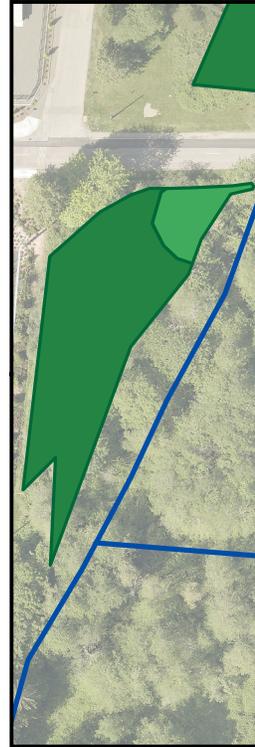
1" = 100'



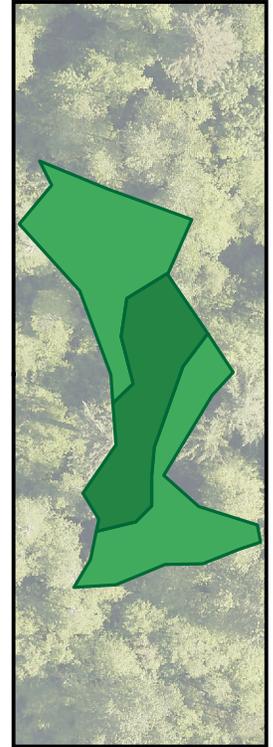
1" = 100'



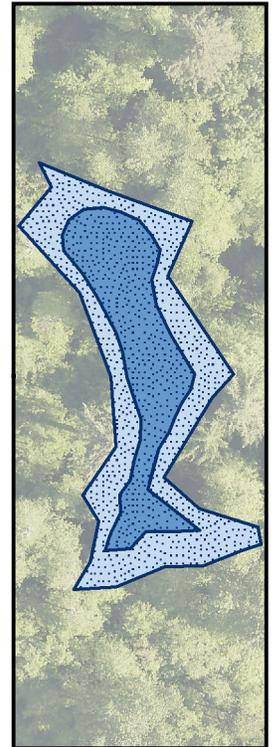
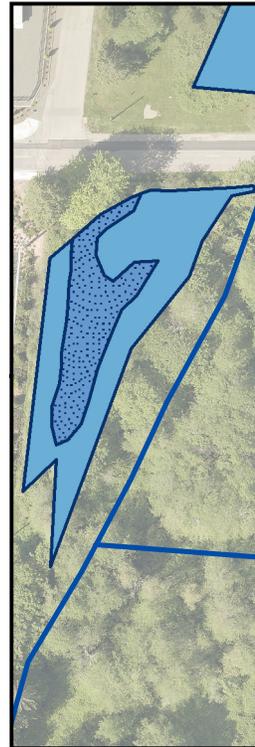
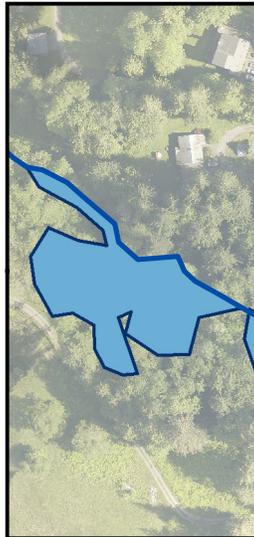
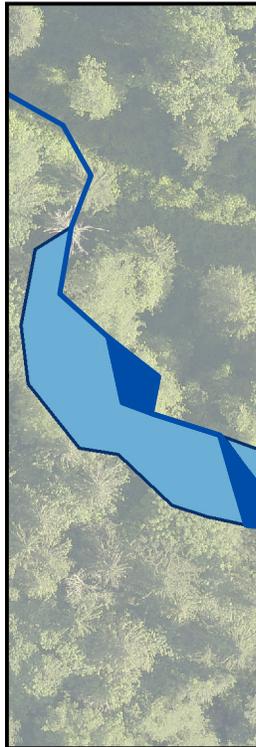
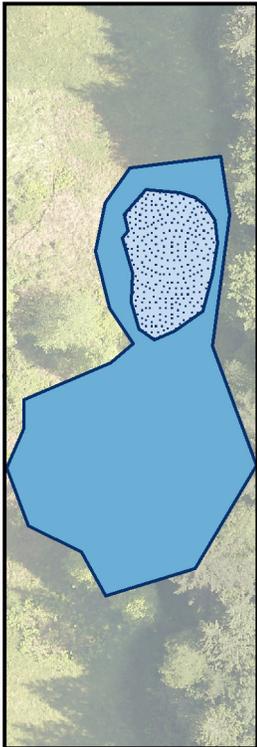
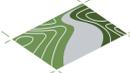
1" = 230'



1" = 150'



1" = 100'

Soundview Consultants LLC
 Environmental Assessment • Planning • Land Use Solutions
 2907 Harborview Dr., Suite D, Gig Harbor, WA 98335
 Phone: (253) 514-8952 Fax: (253) 514-8954
www.soundviewconsultants.com

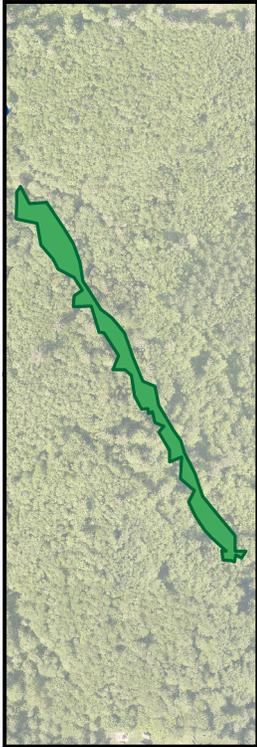
9104, 9110, 9116 & 8904 TVEIT ROAD
 ARLINGTON, WA 98223

SNOHOMISH COUNTY PARCEL NUMBERS:
 31051200400200, 31051200401000, 31050200402300,
 31051200400400, 31051300100200, 3105300100300,
 31051200300100 & 31051200300500

DATE: 10/30/2024
JOB: 2376.0008
BY: DS
SCALE: SEE MAP FRAME
FIGURE NO. 5

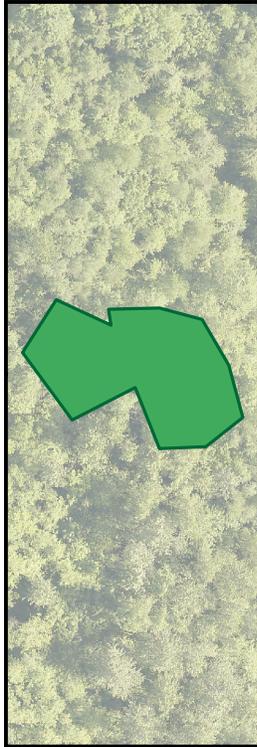
COWARDIN & HYDROPERIOD MAP

Wetland V



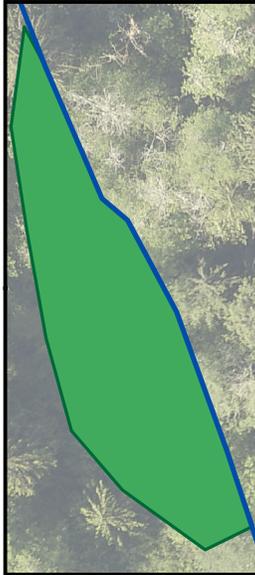
1" = 550'

Wetland W



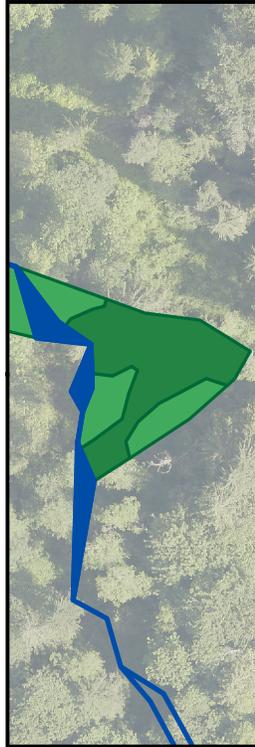
1" = 120'

Wetland X



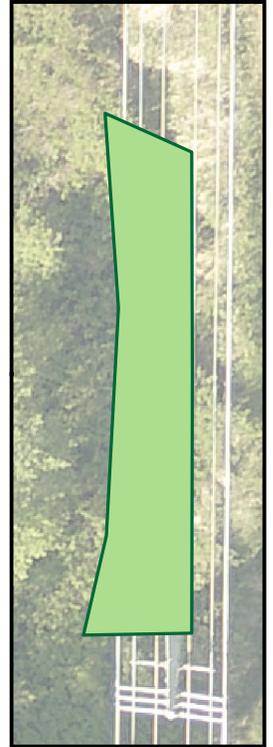
1" = 70'

Wetland Y

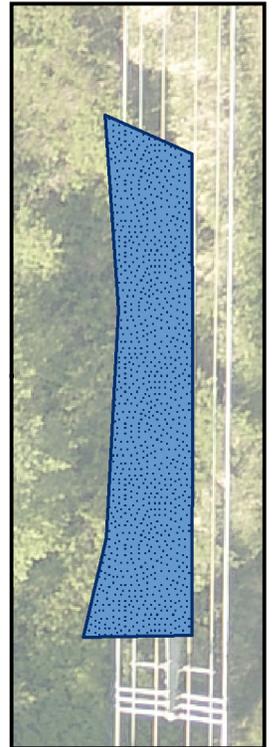
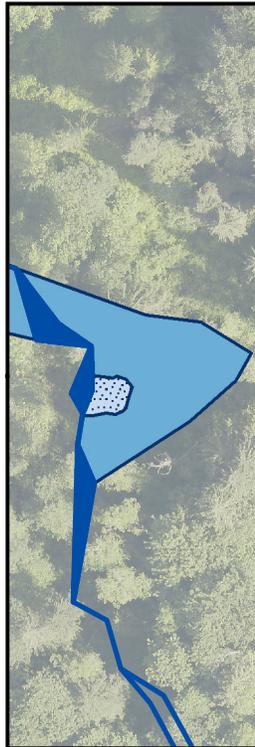
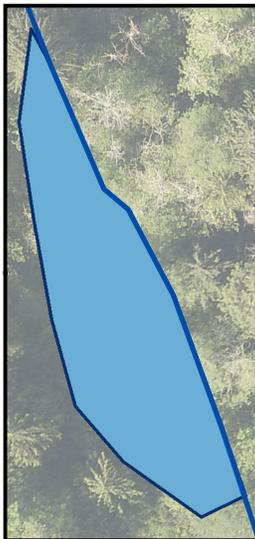
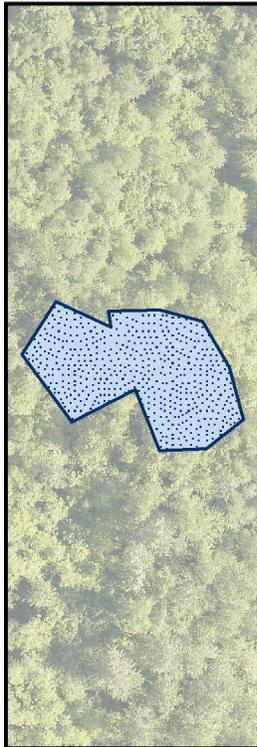
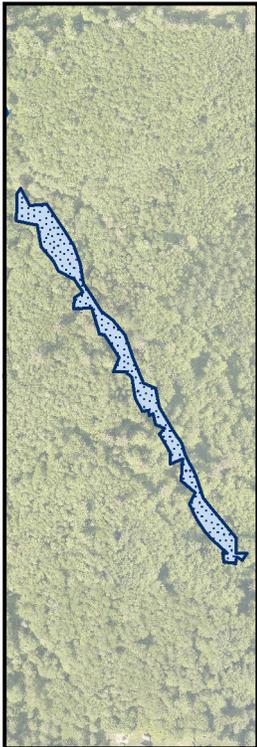
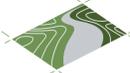


1" = 125'

Wetland 1



1" = 30'

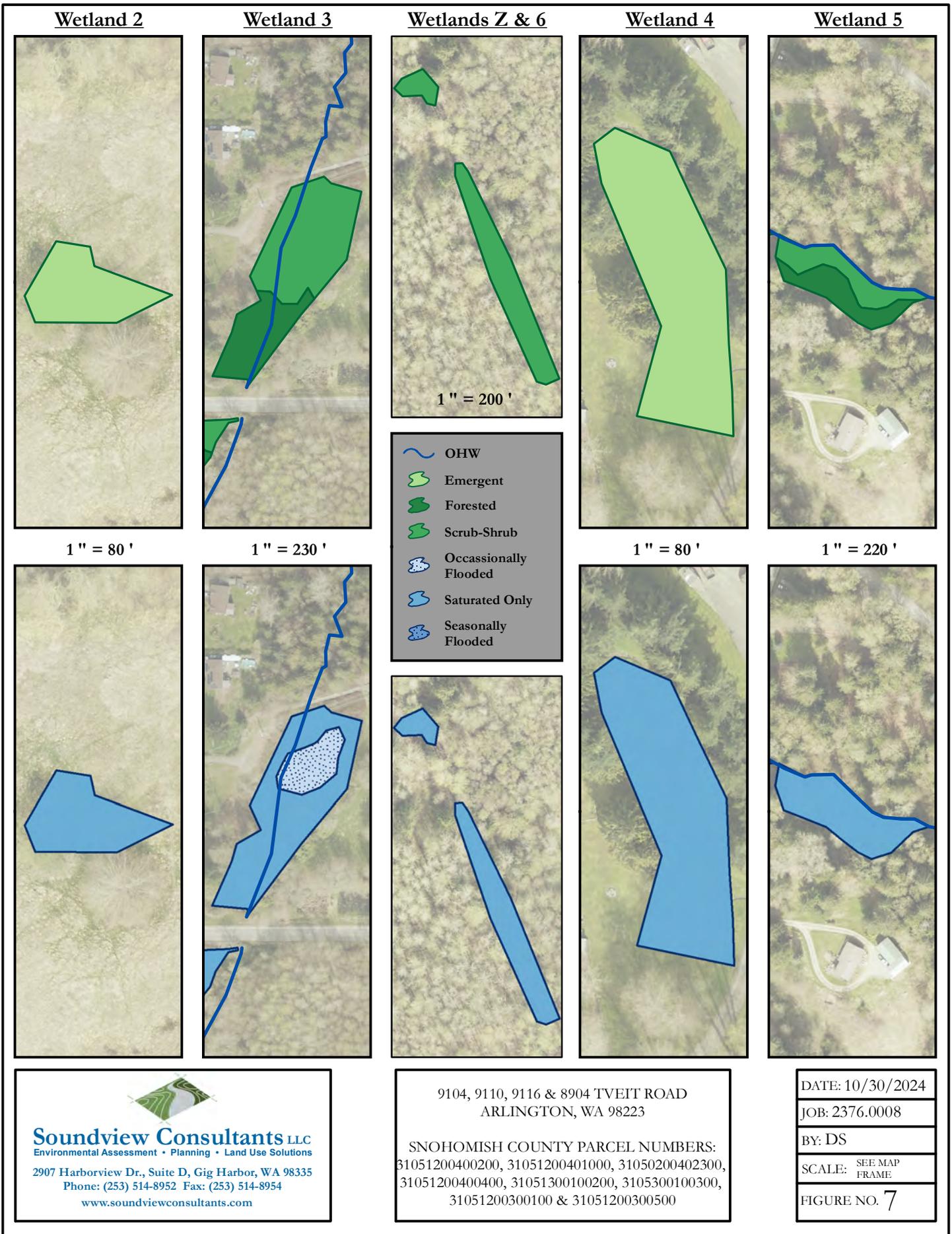
Soundview Consultants LLC
 Environmental Assessment • Planning • Land Use Solutions
 2907 Harborview Dr., Suite D, Gig Harbor, WA 98335
 Phone: (253) 514-8952 Fax: (253) 514-8954
www.soundviewconsultants.com

9104, 9110, 9116 & 8904 TVEIT ROAD
 ARLINGTON, WA 98223

SNOHOMISH COUNTY PARCEL NUMBERS:
 31051200400200, 31051200401000, 31050200402300,
 31051200400400, 31051300100200, 3105300100300,
 31051200300100 & 31051200300500

DATE: 10/30/2024
JOB: 2376.0008
BY: DS
SCALE: SEE MAP FRAME
FIGURE NO. 6

COWARDIN & HYDROPERIOD MAP



Soundview Consultants LLC
 Environmental Assessment • Planning • Land Use Solutions
 2907 Harborview Dr., Suite D, Gig Harbor, WA 98335
 Phone: (253) 514-8952 Fax: (253) 514-8954
www.soundviewconsultants.com

9104, 9110, 9116 & 8904 TVEIT ROAD
 ARLINGTON, WA 98223

SNOHOMISH COUNTY PARCEL NUMBERS:
 31051200400200, 31051200401000, 31050200402300,
 31051200400400, 31051300100200, 3105300100300,
 31051200300100 & 31051200300500

DATE: 10/30/2024

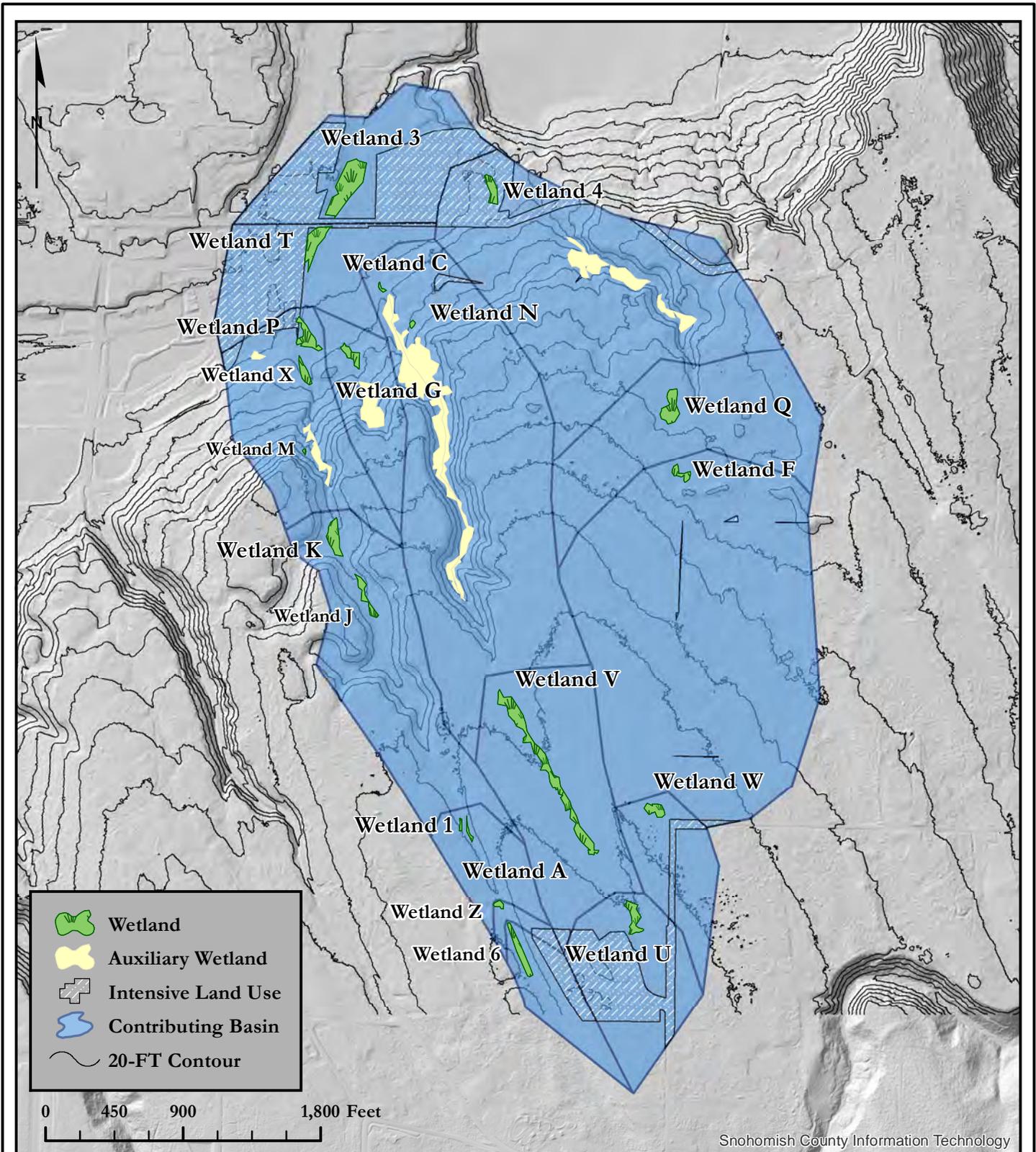
JOB: 2376.0008

BY: DS

SCALE: SEE MAP
 FRAME

FIGURE NO. 7

CONTRIBUTING BASIN MAP



Snohomish County Information Technology



Soundview Consultants LLC
 Environmental Assessment • Planning • Land Use Solutions
 2907 Harborview Dr., Suite D, Gig Harbor, WA 98335
 Phone: (253) 514-8952 Fax: (253) 514-8954
www.soundviewconsultants.com

9104, 9110, 9116 & 8904 TVEIT ROAD
 ARLINGTON, WA 98223

SNOHOMISH COUNTY PARCEL NUMBERS:
 31051200400200, 31051200401000, 31050200402300,
 31051200400400, 31051300100200, 3105300100300,
 31051200300100 & 31051200300500

DATE: 10/30/2024
JOB: 2376.0008
BY: DS
SCALE: 1" = 900'
FIGURE NO. 8

CONTRIBUTING BASIN TABLE

D.4.0 - D.5.3		
Area of Contributing Basin (SF)		705,490
Area of Wetland A (SF)		1,548
Percent of Wetland A within Contributing Basin		0.219%
Area of Intensive Human Land Uses (SF)		79,594
Percent of Intensive Human Land Use within Contributing Basin for Wetland A		11%
Area of Contributing Basin (SF)		4,357,797
Area of Wetland C (SF)		1,149
Percent of Wetland C within Contributing Basin		0.026%
Area of Intensive Human Land Uses (SF)		320,965
Percent of Intensive Human Land Use within Contributing Basin for Wetland C		7%
Area of Contributing Basin (SF)		4,357,797
Area of Wetland F (SF)		5,251
Percent of Wetland F within Contributing Basin		0.120%
Area of Intensive Human Land Uses (SF)		359,234
Percent of Intensive Human Land Use within Contributing Basin for Wetland F		8%
Area of Contributing Basin (SF)		432,868
Area of Wetland G (SF)		7,953
Percent of Wetland G within Contributing Basin		1.837%
Area of Intensive Human Land Uses (SF)		0
Percent of Intensive Human Land Use within Contributing Basin for Wetland G		0%
Area of Contributing Basin (SF)		1,921,896
Area of Wetland J (SF)		8,595
Percent of Wetland J within Contributing Basin		0.447%
Area of Intensive Human Land Uses (SF)		79,594
Percent of Intensive Human Land Use within Contributing Basin for Wetland J		4%
Area of Contributing Basin (SF)		1,921,896
Area of Wetland K (SF)		14,276
Percent of Wetland K within Contributing Basin		0.7428%
Area of Intensive Human Land Uses (SF)		79,594
Percent of Intensive Human Land Use within Contributing Basin for Wetland K		4%
Area of Contributing Basin (SF)		2,832,799
Area of Wetland M (SF)		546
Percent of Wetland M within Contributing Basin		0.019%
Area of Intensive Human Land Uses (SF)		116,744
Percent of Intensive Human Land Use within Contributing Basin for Wetland M		4%
Area of Contributing Basin (SF)		4,539,993
Area of Wetland N (SF)		1,174
Percent of Wetland N within Contributing Basin		0.026%
Area of Intensive Human Land Uses (SF)		320,965
Percent of Intensive Human Land Use within Contributing Basin for Wetland N		7%
Area of Contributing Basin (SF)		2,832,799
Area of Wetland P (SF)		13,671
Percent of Wetland P within Contributing Basin		0.483%
Area of Intensive Human Land Uses (SF)		116,744
Percent of Intensive Human Land Use within Contributing Basin for Wetland P		4%



Soundview Consultants LLC
 Environmental Assessment • Planning • Land Use Solutions
 2907 Harborview Dr., Suite D, Gig Harbor, WA 98335
 Phone: (253) 514-8952 Fax: (253) 514-8954
www.soundviewconsultants.com

9104, 9110, 9116 & 8904 TVEIT ROAD
 ARLINGTON, WA 98223

SNOHOMISH COUNTY PARCEL NUMBERS:
 31051200400200, 31051200401000, 31050200402300,
 31051200400400, 31051300100200, 3105300100300,
 31051200300100 & 31051200300500

DATE: 10/30/2024

JOB: 2376.0008

BY: DS

SCALE: N/A

TABLE NO. **1**

CONTRIBUTING BASIN TABLE

D.4.0 - D.5.3	
Area of Contributing Basin (SF)	5,487,345
Area of Wetland Q (SF)	17,447
Percent of Wetland Q within Contributing Basin	0.318%
Area of Intensive Human Land Uses (SF)	359,234
Percent of Intensive Human Land Use within Contributing Basin for Wetland Q	7%
Area of Contributing Basin (SF)	8,505,137
Area of Wetland T (SF)	18,598
Percent of Wetland T within Contributing Basin	0.219%
Area of Intensive Human Land Uses (SF)	793,883
Percent of Intensive Human Land Use within Contributing Basin for Wetland T	9%
Area of Contributing Basin (SF)	704,025
Area of Wetland U (SF)	12,052
Percent of Wetland U within Contributing Basin	1.712%
Area of Intensive Human Land Uses (SF)	310,620
Percent of Intensive Human Land Use within Contributing Basin for Wetland U	44%
Area of Contributing Basin (SF)	1,865,780
Area of Wetland V (SF)	56,958
Percent of Wetland V within Contributing Basin	3.053%
Area of Intensive Human Land Uses (SF)	320,451
Percent of Intensive Human Land Use within Contributing Basin for Wetland V	17%
Area of Contributing Basin (SF)	1,147,690
Area of Wetland W (SF)	8,029
Percent of Wetland W within Contributing Basin	0.700%
Area of Intensive Human Land Uses (SF)	348,071
Percent of Intensive Human Land Use within Contributing Basin for Wetland W	30%
Area of Contributing Basin (SF)	366,830
Area of Wetland Z (SF)	2,256
Percent of Wetland Z within Contributing Basin	0.615%
Area of Intensive Human Land Uses (SF)	79,594
Percent of Intensive Human Land Use within Contributing Basin for Wetland Z	22%
Area of Contributing Basin (SF)	705,490
Area of Wetland 1 (SF)	1,030
Percent of Wetland 1 within Contributing Basin	0.146%
Area of Intensive Human Land Uses (SF)	79,594
Percent of Intensive Human Land Use within Contributing Basin for Wetland 1	11%
Area of Contributing Basin (SF)	1,680,205
Area of Wetland 3 (SF)	44,148
Percent of Wetland 3 within Contributing Basin	2.628%
Area of Intensive Human Land Uses (SF)	1,680,205
Percent of Intensive Human Land Use within Contributing Basin for Wetland 3	100%
Area of Contributing Basin (SF)	7,645,983
Area of Wetland 4 (SF)	9,501
Percent of Wetland 4 within Contributing Basin	0.124%
Area of Intensive Human Land Uses (SF)	627,719
Percent of Intensive Human Land Use within Contributing Basin for Wetland 4	8%
Area of Contributing Basin (SF)	299,607
Area of Wetland 6 (SF)	12,988
Percent of Wetland 6 within Contributing Basin	4.335%
Area of Intensive Human Land Uses (SF)	64,630
Percent of Intensive Human Land Use within Contributing Basin for Wetland 6	22%



Soundview Consultants LLC
 Environmental Assessment • Planning • Land Use Solutions
 2907 Harborview Dr., Suite D, Gig Harbor, WA 98235
 Phone: (253) 514-8952 Fax: (253) 514-8954
www.soundviewconsultants.com

9104, 9110, 9116 & 8904 TVEIT ROAD
 ARLINGTON, WA 98223

SNOHOMISH COUNTY PARCEL NUMBERS:
 31051200400200, 31051200401000, 31050200402300,
 31051200400400, 31051300100200, 3105300100300,
 31051200300100 & 31051200300500

DATE: 10/30/2024

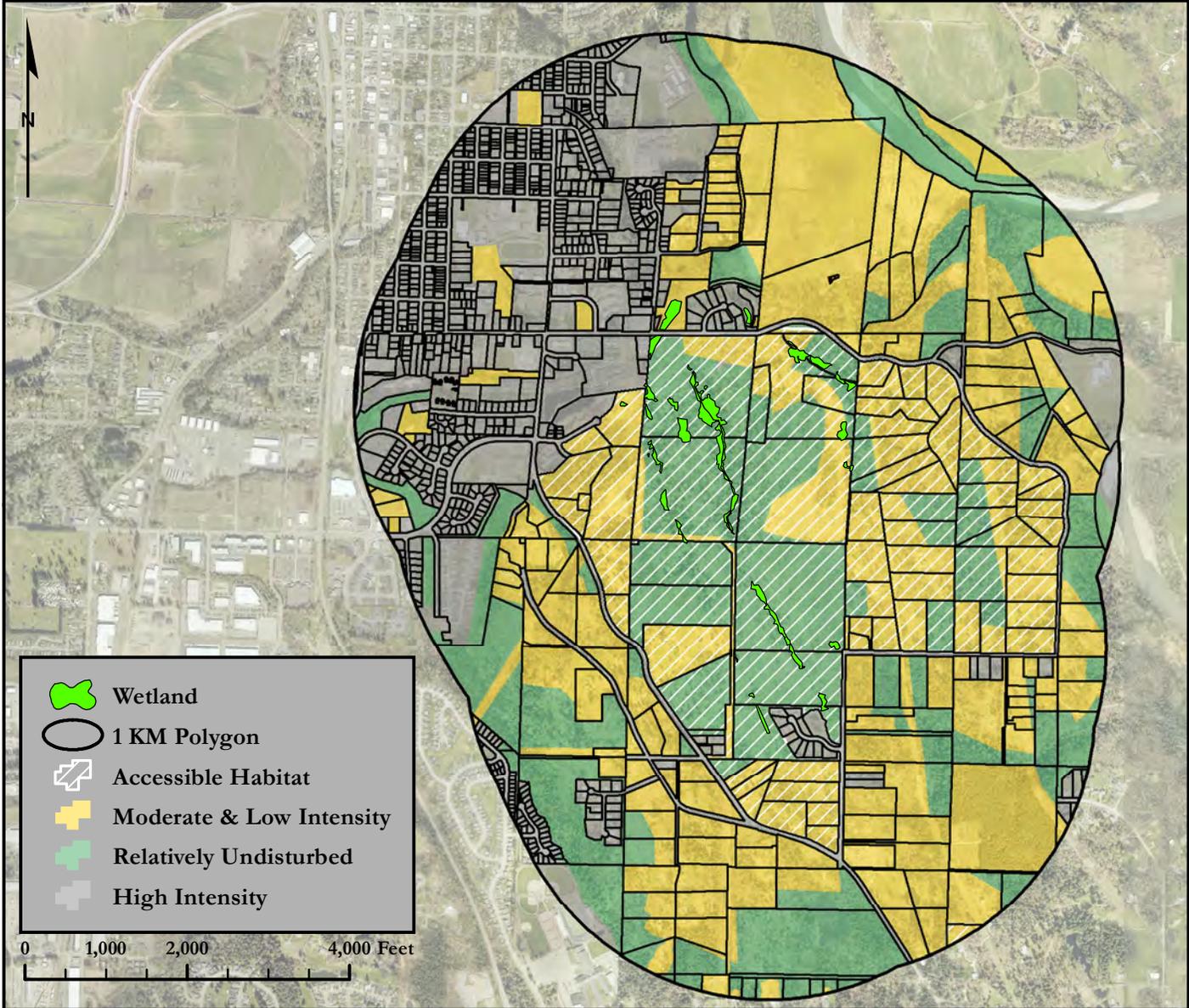
JOB: 2376.0008

BY: DS

SCALE: N/A

TABLE NO. **2**

HABITAT MAP



■ Wetland
 1 KM Polygon
 Accessible Habitat
 Moderate & Low Intensity
 Relatively Undisturbed
 High Intensity

0 1,000 2,000 4,000 Feet

H.2.0		
H.2.1 Wetlands		
	Abutting Undisturbed Habitat	13.58%
	Abutting Moderate & Low Intensity Land Uses	14.18%
	Accessible Habitat	20.67%
H.2.2		
	Undisturbed Habitat	29.20%
	Moderate & Low Intensity Land Uses	45.05%
	Undisturbed Habitat in 1 KM Polygon	51.72%
H.2.3		
	High Intensity Land Use in 1 KM Polygon	25.78%



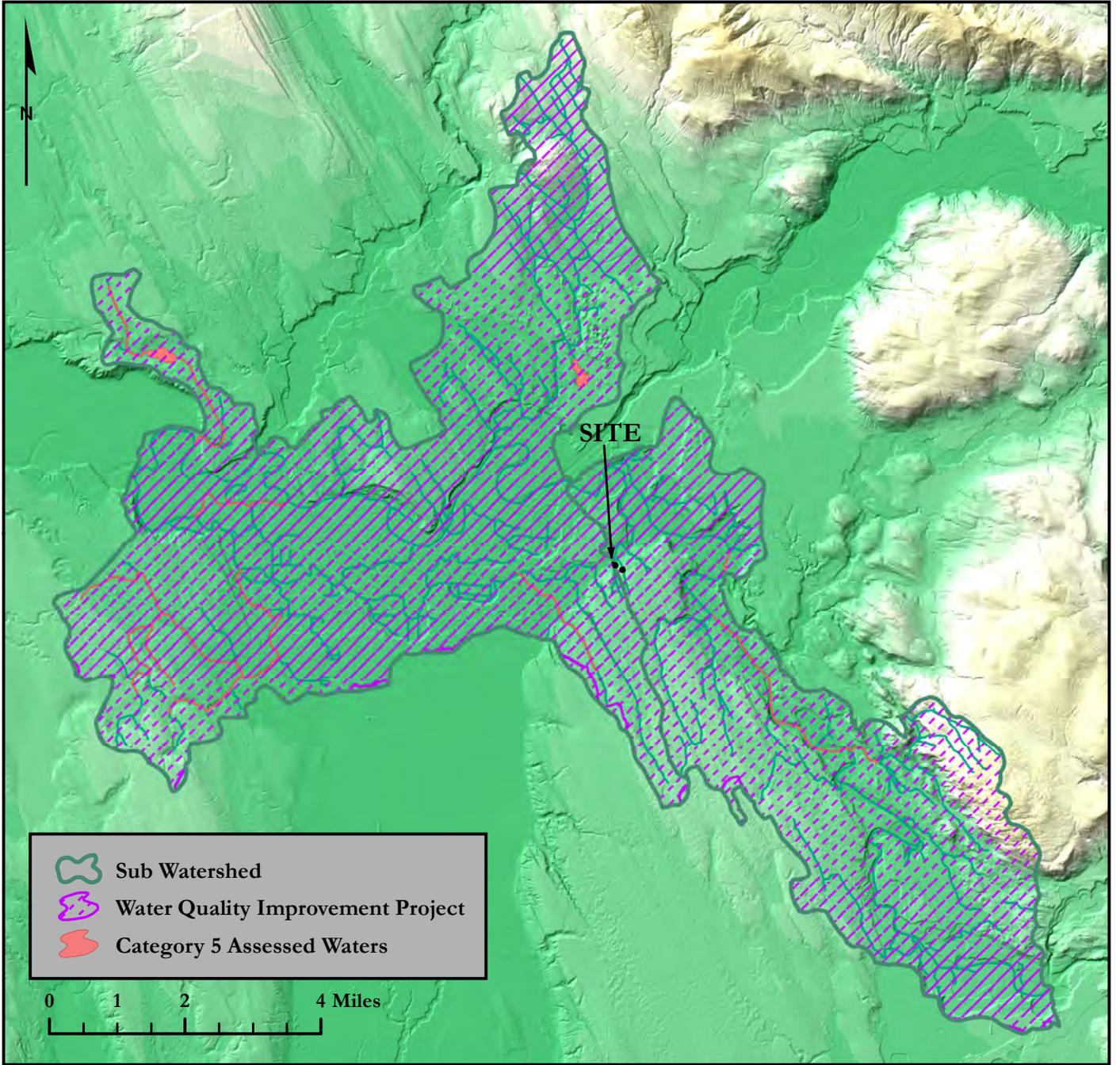
Soundview Consultants LLC
 Environmental Assessment • Planning • Land Use Solutions
 2907 Harborview Dr., Suite D, Gig Harbor, WA 98335
 Phone: (253) 514-8952 Fax: (253) 514-8954
www.soundviewconsultants.com

9104, 9110, 9116 & 8904 TVEIT ROAD
 ARLINGTON, WA 98223

 SNOHOMISH COUNTY PARCEL NUMBERS:
 31051200400200, 31051200401000, 31050200402300,
 31051200400400, 31051300100200, 3105300100300,
 31051200300100 & 31051200300500

DATE: 10/30/2024
JOB: 2376.0008
BY: DS
SCALE: 1" = 2,000'
FIGURE NO. 9

WATER QUALITY MAP



Name	Pollutants	TMDL ID	WRIA	Status	Year Approved
Snohomish River Tributaries Bacteria TMDL	Bacteria	34	7	2001	Approved
Stillaguamish River Watershed Temperature TMDL	Temperature	73	5	2006	Approved
Snohomish River Estuary Multiparameter TMDL	Ammonia-N, CBOD, Dissolved Oxygen	48	7	2002	Approved
Stillaguamish River Watershed Multiparameter TMDL	Bacteria, Dissolved Oxygen, pH, Mercury, Arsenic	75	5	2006	Approved
French and Pilchuck Creeks Temperature and DO TMDL	Temperature, Dissolved Oxygen	133	7	0	In Development
Old Stillaguamish River Channel DO TMDL	Dissolved Oxygen	139	5	0	In Development



Soundview Consultants LLC
 Environmental Assessment • Planning • Land Use Solutions
 2907 Harborview Dr., Suite D, Gig Harbor, WA 98335
 Phone: (253) 514-8952 Fax: (253) 514-8954
www.soundviewconsultants.com

9104, 9110, 9116 & 8904 TVEIT ROAD
 ARLINGTON, WA 98223

SNOHOMISH COUNTY PARCEL NUMBERS:
 31051200400200, 31051200401000, 31050200402300,
 31051200400400, 31051300100200, 3105300100300,
 31051200300100 & 31051200300500

DATE: 10/30/2024
 JOB: 2376.0008
 BY: DS
 SCALE: 1" = 2 mi
 FIGURE NO. 10

Attachment G – Qualifications

Project Manager: Alex Murphy
Field Scientist(s): Rachael Hyland, Casey Lanier
Report Preparation By: Morgan Kentch
Map Preparation By: Dana Scott
Document Quality Assurance By: Rachael Hyland

Alex Murphy is a Project Manager & Senior Environmental Planner with 10 years of professional experience. Alex has a background in land use/environmental planning and regulatory coordination. He currently manages projects for clients of all sizes and types; conducts environmental code analysis, prepares SEPA environmental assessment, mitigation reports, and permit applications to support clients through the planning and permitting processes.

Education: Bachelor of Landscape Architecture, Utah State University, Logan, UT; graduate coursework in Public Administration *Professional Certifications:* American Planning Association and American Institute of Certified Planners (#32107) *Professional Trainings:* Navigating SEPA, How to Administer Development Permits in Washington’s Shorelines, and Advanced Shoreline Permitting: No Net Loss and Mitigation from Washington State Department of Ecology; Adaptation Planning for Coastal Communities from National Oceanic and Atmospheric Administration (NOAA).

Rachael Hyland is a Senior Environmental Scientist with 11 years of professional experience, and is a Professional Wetland Scientist (PWS #3480) through the Society of Wetland Scientists as well as a Certified Ecologist through the Ecological Society of America. Rachael has a background in wetland and ecological habitat assessments in various states, most notably Washington, Connecticut, Massachusetts, Rhode Island, and Ohio. She currently performs wetland, stream, and shoreline delineations and fish and wildlife habitat assessments; conducts environmental code analysis; coordinates with regulatory parties, and provides quality assurance on environmental assessment and mitigation reports, biological evaluations, and permit applications to support clients through the regulatory and planning process for various land use projects. Her noteworthy experiences include delineation of large scale sites and associated mitigation work including wetland creation and stream relocation, and delineation of highly complex, disturbed, and problematic sites requiring extensive background research and understanding of soils and hydrology. Additionally, she also has extensive knowledge of bats and their associated habitats and white nose syndrome (*Pseudogymnoascus destructans*), a fungal disease affecting bats which was recently documented in Washington.

Education: Bachelor of Science degree in Ecology and Evolutionary Biology from University of Connecticut. *Professional Trainings:* 40-hour wetland delineation training for Western Mountains, Valleys, & Coast and Arid West Regional Supplement through Terrascience and Northcentral and Northeast supplement through Institute for Wetland and Environmental Education and Research; Using the Revised 2014 Wetland Rating System for Western Washington, How to Determine the Ordinary High Water Mark, Navigating SEPA, Selecting Wetland Mitigation Sites Using a Watershed Approach, Wetland Classification, and Using the Credit-Debit Method for Estimating Mitigation Needs from Washington State Department of Ecology; Biological Assessment for Transportation Projects from Washington State Department of Transportation *Qualified Author and Scientist Lists:* Washington State Department of Transportation Biological Assessment Junior Author; Pierce County Qualified Wetland and Wildlife Specialist; Kitsap County Qualified Wetland, Habitat, and Shoreline Consultant.

Casey Lanier is an Environmental Scientist and Project Manager with 11 years of professional experience. Casey has a background in hydrology, riparian ecology, fisheries, and data collection and telemetry. He currently works as a project manager supporting single family and small commercial development projects navigating the permitting and critical areas review process. He also performs and leads small teams in wetland, stream, and shoreline delineations as well as fish and wildlife habitat assessments. His noteworthy experiences include construction monitoring and support for large stream relocation projects as well as wetland restoration and mitigation projects, time-series hydrologic data analysis for regulatory compliance and team lead for fish recovery and exclusion projects.

Education: Bachelor of Science in Environmental Science from California State University Monterey Bay), Graduate Level Course Work in Fisheries and Wildlife Management from Oregon State University. *Professional Trainings:* Washington Department of Ecology Wetland Rating Manual, Determining the Ordinary High Water Mark, How to Conduct a Forage Fish Survey, 40-hour wetland delineation training utilizing the US Army Corps of Engineers Wetland Delineation Manual (Western Mtns, Valleys, & Coast and Arid West Regional Supplement) *Qualified Author and Scientist Lists:* Pierce County Qualified Wetland Scientist.

Morgan Kentch is an Environmental Scientist with 5 years of professional experience. She has a background in marine and freshwater ecology, wildlife and natural resource assessments, and monitoring wetland and riparian habitat restoration sites in the Pacific Northwest. She currently assists with performing wetland, stream, and shoreline delineations and fish and wildlife habitat assessments, conducting environmental code analysis, and preparing and/or providing final quality assurance/control for various types of scientific reports and permits for agency submittal. Her noteworthy experiences include analyzing datasets for wetland hydrology monitoring, collecting eDNA samples from streams for analysis, providing document quality assurance on critical area reports, mitigation plans, and permitting documents prior to submittal, and assisting with Endangered Species Act documentation for federal permit submittals.

Education: Bachelor of Science degree in Biology with Marine Emphasis from Western Washington University, Bellingham. *Professional Training:* 40-hour wetland delineation training (Western Mountains, Valleys, and Coast and Arid West Regional Supplements), Using the 2014 Wetland Rating System, and How to Determine the Ordinary High Water Mark. *Qualified Author and Scientists Lists:* Pierce County Wetland Specialist.

Dana Scott is Design Lead with 15 years of professional experience. Dana has a background in habitat assessment and restoration, marine science, geospatial technologies, and drafting. She currently ensures that Soundview Consultants have a successful, well supported team of design professionals that provide expert level design and spatial services. Her skill set also encompasses overseeing quality assurance, managing data, and reviewing reports, ensuring the precision and reliability of critical information essential for well-informed decision-making.

Education: Master of Geospatial Technologies from University of Washington, Tacoma. Bachelor of Science from University of Washington, Tacoma. Bachelor in Business Administration, University of Washington, Tacoma. *Professional Certifications:* GIS Certificate *Professional Trainings:* Puget Sound Harmful Algal Bloom Data Collection and Publication From National Oceanic and Atmospheric Administration, Designing and Installing Mitigation and Restoration Projects, Coastal Inundation Mapping From National Oceanic and Atmospheric Administration, 2021 Interagency Wetland Mitigation Guidance, PMEP Estuaries Explorer and Estuary Viewer Data Tools Training, Puget Sound Coastal Processes, Training Series for Alternatives to Bulkheads, Using Wetland Rating System, Using the Marine Shoreline Design Guidelines for Marine Shoreline Stabilization from Washington

State Department of Ecology. *Publications:* Chambers Creek Tributary Remote Sensing Study, Soil Analysis Survey of Point Defiance Park, Study of Microplastic Impacts on Aquatic Environments from University of Washington, Tacoma, Coauthor of "Biodiversity Survey of Benthic Communities of Commencement Bay", 2011 Final Report for Citizens for a Healthy Bay from Washington State Department of Ecology.