Appendix D – Wetland Delineation and Stream Report

# WETLAND AND STREAM DELINEATION REPORT

Bremerton National Airport Environmental Assessment

DOWL Project No. 2072.15229.01

December 11, 2024

Prepared for:

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Attachment D: Wetland Ratings



# **ACRONYMS & ABBREVIATIONS**

ADG	°F	degrees Fahrenheit
DNR Environmental Resources EA Environmental Assessmen Ecology Washington State Department of Ecology EPA Environmental Protection Agency ESA Environmental Protection Agency ESA Endangered Species Ac FBO Fixed Base Operato FWHCAS Fish and Wildlife Habitat Conservation Areas GA General Aviation HGM hydrogeomorphic HPA Hydraulic Project Approva LiDAR Hydraulic Project Approva LiDAR Hydraulic Project Approva NRCS Natural Resources Conservation Service NWI National Wetlands Inventor NWIFC Northwest Indian Fisheries Commission OHWM Ordinary high water marl PHS Priority Habitats and Species Port Port Priority Habitats and Species RCW Revised Code of Washington SR State Route SWIFD Statewide Washington Integrated Fisheries Distribution TDG Taxiway Design Group USACE U.S. Army Corps of Engineers USFWS United States Fish and Wildlife Service USGS U.S. Geological Survey WDFW Washington Department of Fish and Wildlife WOTUS Waters of the United States		
EA. Environmental Assessmen Ecology Washington State Department of Ecology EPA Environmental Protection Agency ESA Endangered Species Ac FBO Fixed Base Operato FWHCAS Fish and Wildlife Habitat Conservation Areas GA General Aviation HGM hydrogeomorphic HPA Hydraulic Project Approva LiDAR light detection and ranging NRCS Natural Resources Conservation Service NWI National Wetlands Inventor NWIFC Northwest Indian Fisheries Commission OHWM ordinary high water marl PHS Priority Habitats and Species Port Port of Bremertor RCW Revised Code of Washington SR State Route SWIFD Statewide Washington Integrated Fisheries Distribution TDG Taxiway Design Group USACE U.S. Army Corps of Engineers USFWS United States Fish and Wildlife Service USGS U.S. Geological Survey WDFW Washington Department of Fish and Wildlife WOTUS Waters of the United States	CWA	Clean Water Act
Ecology	DNR	Washington Department of Natural Resources
EPA Environmental Protection Agency ESA Endangered Species Ac FBO Fixed Base Operato FWHCAS Fish and Wildlife Habitat Conservation Areas GA General Aviation HGM hydrogeomorphic HPA Hydraulic Project Approva LiDAR light detection and ranging NRCS Natural Resources Conservation Service NWI National Wetlands Inventor NWIFC Northwest Indian Fisheries Commission OHWM ordinary high water marl PHS Priority Habitats and Species Port Port of Bremertor RCW Revised Code of Washingtor SR State Route SWIFD Statewide Washington Integrated Fisheries Distribution TDG USACE U.S. Army Corps of Engineers USFWS United States Fish and Wildlife Service USGS USS Waters of the United States Wortus	EA	Environmental Assessment
ESA Endangered Species Ac FBO Fixed Base Operato FWHCAs Fish and Wildlife Habitat Conservation Areas GA General Aviation HGM hydrogeomorphic HPA Hydraulic Project Approva LiDAR Iight detection and ranging NRCS Natural Resources Conservation Service NWI National Wetlands Inventor NWIFC Northwest Indian Fisheries Commission OHWM ordinary high water marl PHS Priority Habitats and Species Port Port Port of Bremerton RCW Revised Code of Washington SR State Route SWIFD Statewide Washington Integrated Fisheries Distribution TDG Taxiway Design Group USACE U.S. Army Corps of Engineers USFWS United States Fish and Wildlife Service USGS U.S. Geological Survey WDFW Washington Department of Fish and Wildlife WOTUS Waters of the United States	Ecology	Washington State Department of Ecology
FBO Fixed Base Operator FWHCAs Fish and Wildlife Habitat Conservation Areas GA General Aviation HGM hydrogeomorphic HPA Hydraulic Project Approva LiDAR light detection and ranging NRCS Natural Resources Conservation Service NWI National Wetlands Inventor NWIFC Northwest Indian Fisheries Commission OHWM ordinary high water maring PHS Priority Habitats and Species Port Port of Bremerton SRCW Revised Code of Washington SR State Route SWIFD Statewide Washington Integrated Fisheries Distribution TDG Taxiway Design Group USACE U.S. Army Corps of Engineers USFWS United States Fish and Wildlife Service WDFW Washington Department of Fish and Wildlife WOTUS Waters of the United States	EPA	Environmental Protection Agency
FWHCAs Fish and Wildlife Habitat Conservation Areas GA General Aviation HGM hydrogeomorphic HPA Hydraulic Project Approva LiDAR light detection and ranging NRCS Natural Resources Conservation Service NWI National Wetlands Inventor NWIFC Northwest Indian Fisheries Commission OHWM ordinary high water marl PHS Priority Habitats and Species Port Port of Bremertor RCW Revised Code of Washingtor SR State Route SWIFD Statewide Washington Integrated Fisheries Distribution TDG Taxiway Design Group USACE U.S. Army Corps of Engineers USFWS United States Fish and Wildlife Service USGS U.S. Geological Survey WDFW Washington Department of Fish and Wildlife WOTUS Waters of the United States	ESA	Endangered Species Act
GA	FBO	Fixed Base Operator
HGM hydrogeomorphic HPA Hydraulic Project Approva LiDAR light detection and ranging NRCS Natural Resources Conservation Service NWI National Wetlands Inventor NWIFC Northwest Indian Fisheries Commission OHWM ordinary high water mark PHS Priority Habitats and Species Port Port of Bremertor RCW Revised Code of Washington SR State Route SWIFD Statewide Washington Integrated Fisheries Distribution TDG Taxiway Design Group USACE U.S. Army Corps of Engineers USFWS United States Fish and Wildlife Service USGS U.S. Geological Survey WDFW Washington Department of Fish and Wildlife WOTUS Waters of the United States	FWHCAs	Fish and Wildlife Habitat Conservation Areas
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LiDAR	HGM	hydrogeomorphic
NRCS Natural Resources Conservation Service NWI National Wetlands Inventor NWIFC Northwest Indian Fisheries Commission OHWM ordinary high water mark PHS Priority Habitats and Species Port Port of Bremertor RCW Revised Code of Washington SR State Route SWIFD Statewide Washington Integrated Fisheries Distribution TDG Taxiway Design Group USACE U.S. Army Corps of Engineers USFWS United States Fish and Wildlife Service USGS U.S. Geological Survey WDFW Washington Department of Fish and Wildlife WOTUS Waters of the United States	HPA	Hydraulic Project Approval
NWIFC Northwest Indian Fisheries Commission  OHWM ordinary high water mark  PHS Priority Habitats and Species  Port Port of Bremertor  RCW Revised Code of Washington  SR State Route  SWIFD Statewide Washington Integrated Fisheries Distribution  TDG Taxiway Design Group  USACE U.S. Army Corps of Engineers  USFWS United States Fish and Wildlife Service  USGS U.S. Geological Survey  WDFW Washington Department of Fish and Wildlife  WOTUS Waters of the United States	LiDAR	light detection and ranging
NWIFC	NRCS	Natural Resources Conservation Service
OHWM	NWI	National Wetlands Inventory
PHS	NWIFC	Northwest Indian Fisheries Commission
Port	OHWM	ordinary high water mark
RCW	PHS	Priority Habitats and Species
SR	Port	Port of Bremerton
SWIFD	RCW	Revised Code of Washington
TDG		
TDG	SWIFD	Statewide Washington Integrated Fisheries Distribution
USFWS		
USGS	USACE	U.S. Army Corps of Engineers
WDFWWashington Department of Fish and Wildlife WOTUSWaters of the United States	USFWS	United States Fish and Wildlife Service
WDFWWashington Department of Fish and Wildlife WOTUSWaters of the United States	USGS	U.S. Geological Survey
WOTUSWaters of the United States		



## **EXECUTIVE SUMMARY**

The Port of Bremerton is proposing several construction projects at Bremerton National Airport, including a taxiway extension, new aprons, new hangars, new roads, and a sky park. Because the projects will use Federal Aviation Administration funds, the project must comply with the National Environmental Policy Act by conducting an Environmental Assessment. In support of the project, DOWL has prepared this report to document the presence and extent of wetlands and streams in the vicinity of the proposed projects.

This wetland and stream report documents the presence and location of wetlands and their buffers to inform project design and subsequent ability to avoid or minimize potential impacts to these aquatic resources. Wetlands and streams are subject to regulations implemented by the U.S. Army Corps of Engineers, Washington State Department of Ecology, and by the City of Bremerton through its municipal code.

During site visits conducted in October and November 2023, DOWL environmental staff identified and delineated 12 wetlands and five streams in the study area which are summarized in the tables below.

Wetland Name	Cowardin Class	HGM Classification	Size (acres)	Rating	City of Bremerton Buffer Width (feet)
Wetland 1	Palustrine emergent, Palustrine scrub shrub	Depressional	7.35	III	150
Wetland 2	Palustrine emergent	Depressional	1.03	111	150
Wetland 3	Palustrine scrub shrub	Depressional	0.05	IV	50
Wetland 4	Palustrine emergent, Palustrine scrub shrub, Palustrine aquatic bottom	Depressional	7.11	II	300
Wetland 5	Palustrine emergent, Palustrine scrub shrub, Palustrine forested	Depressional	10.32	II	150
Wetland 6	Palustrine emergent, Palustrine scrub shrub	Depressional	2.15	II	150
Wetland 7	Palustrine scrub shrub	Depressional	0.70	III	80
Wetland 8	Palustrine scrub shrub	Depressional	0.02	III	150
Wetland 9	Palustrine scrub shrub, Palustrine forested	Depressional	0.59	III	150
Wetland 10	Palustrine emergent, Palustrine scrub shrub	Depressional	0.14	Ш	150
Wetland 11	Palustrine emergent, Palustrine scrub shrub	Depressional	0.30	III	80
Wetland 12	Palustrine emergent	Depressional	1.71		80



Stream Name	Connects to	DNR Water Type	Buffer Width (feet)
Stream 1	NWI mapped wetland outside study area	Non-fish seasonal	35
Stream 2	Stream 2 connects directly to Stream 3 which outlets to the North East Fork Union River	Non-fish seasonal	35
Stream 3	North East Fork Union River	Fish	150
Stream 4	Stream 4 is an outlet of Wetland 4 and flows through a culvert under the maintenance road. It then flows for a short distance toward another maintenance road and then infiltrates into groundwater.	Non-fish seasonal	35
Stream 5	Coulter Creek	Fish	150



## 1.0 INTRODUCTION

DOWL was contracted by the Port of Bremerton (Port) to identify, characterize, and delineate wetlands and streams within an approximately 750-acre study area at the Bremerton National Airport. Bremerton National Airport is located in Kitsap County, adjacent to State Route (SR) 3, within Bremerton, Washington (Figure 1). The airport property is within Sections 11, 12, 13, and 14 of Township 23 North, Range 01 West, Willamette Meridian.

The Port is conducting an Environmental Assessment (EA) to identify the potential for significant impacts and identify potential opportunities to avoid or minimize potential impacts.

The EA will include four proposed development projects at the Bremerton International Airport, as described below.

- 1. East Parallel Taxiway (constructed in three phases), North Access Road, and Hangar Access Road. This project will include the following elements:
  - a. Construction of a portion of the new east parallel taxiway from Taxiway A3 north to the new eastside hangar development area. The new taxiway and associated taxi lanes will be designed to Airport Design Group (ADG) B-11 standards and Taxiway Design Group (TDG) 2N2B standards.
  - b. Construction of the North Access Road from Airport Way SW to serve vehicles to the new eastside hangar development.
  - c. Construction of a hangar access road to serve new eastside hangar development.
  - d. Stormwater facilities to support the proposed improvements.
  - e. Phase 2 of the east parallel taxiway extension will extend the new eastside parallel taxiway from Taxiway A3 south the full length of Runway 2-20 and connect to the existing Runway 2 threshold via a new connector taxiway. Additional taxiway connectors and a new hold apron or bypass taxiway will be included with this taxiway extension.
  - f. Phase 3 of the east parallel taxiway extension will extend the new eastside parallel taxiway north from the Runway 20 end to the end of the existing blast pad/clearway. New taxiway connectors and a hold apron or bypass taxiway will be included.
- 2. Northeast Hangar Development. This project will include phased development of new aircraft hangars, to be accessed via the new east parallel taxiway, north access road, and hangar access road. The hangar development configuration is designed to make use of the relatively level area along both sides of the closed runway (Runway 16/34). The development would accommodate a variety of hangar types and sizes including Thangars and box hangars. This development will require utility extensions and new stormwater water quality and detention systems.
- 3. The new FBO/GA Apron is a development reserve area of Runway 2/20 and a segment of the East Parallel Taxiway. A portion of the FBO/GA Apron footprint includes the current Moto West Racetrack motocross course. The FBO/GA Apron could accommodate hangars, buildings, and aircraft fueling. The FBO/GA apron will tie in with the planned East Parallel Runway.

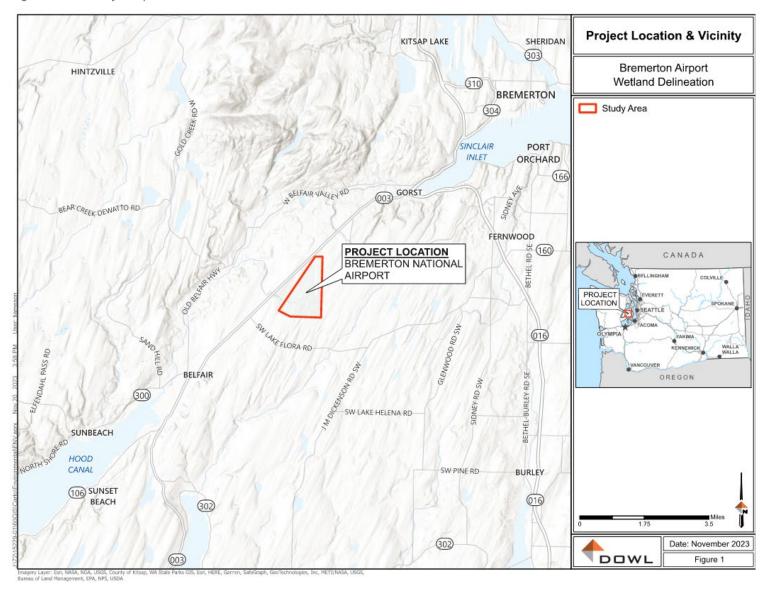


4. Commercial Service Apron. This will include construction of a new apron to support future commercial service at the airport. The new apron will be on the east side of the main runway, south of the planned FBO/GA apron, and tie in with the planned East Parallel Runway.

This report documents the presence and geographic extent of wetlands and streams delineated by DOWL environmental staff. The regulatory setting is described in Section 4.



Figure 1: Vicinity Map





## 2.0 METHODS

## 2.1 Desktop Review

To understand existing site conditions, DOWL environmental staff conducted a review of publicly available data prior to the site visit including, but not limited to:

- Kitsap County Parcel Data (Kitsap County 2023)
- U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) (USFWS 2023)
- Natural Resources Conservation Service (NRCS) Web Soil Survey (NRCS 2023)
- Northwest Indian Fisheries Commission (NWIFC) Statewide Washington Integrated Fisheries Distribution (SWIFD) (NWIFC 2023)
- Washington Department of Natural Resources (DNR) Forest Practices Application Mapping Tool (DNR 2023a)
- Washington State DNR light detection and ranging (LIDAR) Portal (DNR 2023b)
- Washington Department of Fish and Wildlife (WDFW) Priority Habitats and Species (PHS) on the Web (WDFW 2023)
- U.S. Geological Survey (USGS) National Water Information System Mapper (USGS 2023a), USGS StreamStats (USGS 2023b)
- Google Earth aerial imagery

## 2.2 Field Investigation

DOWL environmental staff conducted site visits on October 2, 3, 9, 10, 23, 24, 25 and November 6, 2023, to identify and delineate wetlands and streams in the study area.

#### 2.2.1 Wetlands

DOWL delineated wetlands in accordance with the U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual (Environmental Laboratory 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0) (USACE 2010). At each sampling plot, DOWL dug soil test pits to a depth of at least 16 inches or to the presence of a restrictive digging layer. DOWL recorded vegetation, soil, and hydrology characteristics on USACE Wetland Determination Data Sheets. DOWL classified vegetation according to Classification of Wetlands and Deepwater Habitats of the United States (FGDC 2013). DOWL recorded soil color according to Munsell Soil-Color Charts (Munsell 2012) and evaluated soil in accordance with Field Indicators of Hydric Soils. A Guide for Identifying and Delineating Hydric Soils, Version 8.2 (NRCS 2018).

DOWL rated wetlands in accordance with the *Washington State Wetland Rating System for Western Washington: 2014 Update* (Hruby 2014). In the Washington rating system, a wetland receives a rating between Category I (the highest rating) and Category IV (the lowest). The rating may be based on level of function, indicating how well the wetland provides three



ecosystem services (water quality, hydrology, and habitat); or the rating may be based on special characteristics, indicating the wetland is of a type that would be difficult to replace, such as an estuary or bog.

DOWL mapped stream and wetland boundaries in the study area using an Eos Arrow 100 Global Navigation Satellite System receiver with submeter accuracy. DOWL estimated stream and wetland boundaries outside the study area using DNR stream maps, DNR LIDAR maps (DNR 2023a, DNR 2023b), USFWS wetland maps, and aerial imagery.

#### 2.2.2 Streams

DOWL assessed streams in accordance with the following:

- Determining the Ordinary High Water Mark for Shoreline Management Act Compliance in Washington State (Anderson, et al. 2016)
- Regulatory Guidance Letter 05-05 (USACE 2005)
- National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams, Interim Version (David, et al. 2022)

## 3.0 RESULTS

## 3.1 Landscape Setting

The study area is in Water Resource Inventory Area (WRIA) 15, the Kitsap watershed, which contains short streams that discharge directly into Puget Sound and Hood Canal. WRIA 15 includes the entire Kitsap Peninsula and comprises 676 square miles (Ecology 2021). Approximately ten percent of the Kitsap watershed is within a designated urban growth area. Approximately two percent of the watershed is under federal ownership. WRIA 15 has been significantly altered from its historic conditions due to extensive development and population growth which has removed forest canopy cover, filled and drained wetlands, and channelized streams, resulting in habitat loss and degradation.

The basin receives most of its hydrology from precipitation. Annual precipitation varies from less than 30 inches at the northern tip of the Kitsap Peninsula to more than 80 inches along the Hood Canal in the southwest portion of the watershed. On average, most of the watershed receives an average of 40 to 60 inches of annual precipitation (Ecology 2021).

## 3.2 Site Description

#### 3.2.1 Plant Communities

Areas of the airport property, including the runway and the runway safety area, are maintained and regularly mowed. Vegetation in these areas is dominated by grasses and weedy herbaceous species. In the undeveloped areas east of the runway, upland vegetation is forested and dominated by native tree species including Douglas fir (*Pseudotsuga menziesii*), western hemlock (*Tsuga heterophylla*), and western white pine (*Pinus monticola*). The shrub layer is dominated by evergreen huckleberry (*Vaccimium ovatum*) and salal (*Gaultheria shallon*) with invasive scotch broom (*Cytisus scoparius*) and Himalayan blackberry (*Rubus armeniacus*).



Herbaceous species typically include sword fern (*Polystichum munitum*), bracken fern (*Pteridium aquilinum*) and trailing blackberry (*Rubus ursinus*).

Wetlands are typically dominated by Douglas spiraea (*Spiraea douglasii*) and willow (*Salix* sp.). Herbaceous vegetation is typically reed canarygrass (*Phalaris arundinacea*), soft rush (*Juncus effusus*), and slough sedge (*Carex obnupta*).

Riparian vegetation is similar to the forested upland species and typically dominated by Douglas fir, western hemlock, western red cedar (*Thuja plicata*), and red alder (*Alnus rubra*).

#### 3.2.2 Topography

Elevations within the study area range from approximately 435 feet to 505 feet above sea level. A ridge running northeast to southwest, roughly parallel to the main runway and SR 3, divides the study area into two main watersheds. Waters west of the ridge drain to the North East Fork Union River; waters east of the ridge drain to Coulter Creek.

#### 3.2.3 Climate

Climate conditions for the study area are characterized by approximately 59 inches of average annual rainfall (USGS 2023b). Temperatures range from 48 degrees Fahrenheit (°F) average in the winter to 74°F average in the summer (NOAA 2023). As with most of western Washington, the highest monthly precipitation occurs between October 1 and March 31, with summer rainfall accounting for only about 11 percent of annual precipitation.

Table 1 displays USACE Antecedent Precipitation Tool results for Bremerton Airport on the dates of the field investigation. The site visits occurred during normal precipitation or when precipitation was wetter than normal (USACE 2023). All site visits occurred during the wet season. Site visits during wetter than normal conditions have the potential for hydrology indicators to be present that are absent during normal conditions (i.e. high water table, saturation, surface water). Precipitation data is included in Appendix B.



Table 1: USACE Antecedent Precipitation Tool Results

Date of Field Visit	Climatic Conditions
October 2, 2023	Wetter than normal
October 3, 2023	Wetter than normal
October 10, 2023	Normal
October 11, 2023	Normal
October 23, 2023	Normal
October 24, 2023	Normal
October 25, 2023	Normal
November 6, 2023	Wetter than normal

## 3.2.4 Soils

NRCS Web Soil Survey identifies ten soil map units in the study area. Table 2 presents the survey results. The NRCS soils map is included in Attachment A as Figure 1.



Table 2: Summary of NRCS Soil Map Units in Study Area

Map Unit Name	Associated Landforms	Drainage Class	Hydric Soil Rating	Approximate Percentage of Study Area
Alderwood gravelly sandy loam, 0 to 8 percent slopes	Hills, ridges	Moderately well drained	No	44
Alderwood gravelly sandy loam, 0 to 8 percent slopes	Hills, ridges	Moderately well drained	No	44
Alderwood gravelly sandy loam, 8 to 15 percent slopes	Hills, ridges	Moderately well drained	No	11
Alderwood gravelly sandy loam, 15 to 30 percent slopes	Hills, ridges	Moderately well drained	No	<1
Dystric Xerothents, 45 to 70 percent slopes	Valleys, streams	Moderately well drained	No	<1
Harstine gravelly ashy sandy loam, 0 to 6 percent slopes	Ridges	Moderately well drained	No	17
McKenna gravelly loam	Depressions	Poorly drained	Yes	2
Neilton gravelly loamy sand, 0 to 3 percent slopes	Terraces	Excessively drained	No	<1
Shalcar muck	Depressions	Very poorly drained	Yes	<1
Urban land-Alderwood complex, 0 to 8 percent slopes	Moraines, till plains	Moderately well drained	No	24
Water	Alluvial cones	n/a	n/a	<1

#### 3.3 Wetlands

## 3.3.1 Desktop Review

The USFWS NWI maps five wetlands in the study area. Kitsap County Parcel Search maps five wetlands in the same areas mapped by NWI, albeit with some minor differences in size and shape. Kitsap County does not provide Cowardin classifications. Table 10 summarizes NWI-mapped wetlands in the study area. Attachment A, Figure 2 displays NWI and Kitsap County wetland mapping.



Table 3: Summary of Previously Mapped Wetlands in the Study Area

Cowardin Class <sup>1</sup>	Outlets To	Approximate Size (acres)	Location
PSSC, PEM1/UBF	Unnamed Stream 2	8	South edge of study area, in line with main runway
PSSC	North East Fork Union River	4	Center of south edge of study area
PEM1C, PUBH	Tributary 2 to Unnamed Stream 1	7	Between main runway and Bremerton Raceway
PABH	n/a	1	Northeast corner of Airport Way SW and SW Old Clifton Road
PSSC	Unnamed Stream 3	6	East edge of study area, northeast of one-acre PABH wetland

#### 3.3.2 Field Investigation

DOWL environmental staff identified and delineated 12 wetlands in the study area ranging in size from 0.02 to 10.03 acres. For wetlands that extend outside of the study area, the portion of the boundary outside of the study area was estimated using aerial imagery, topography, and LiDAR imagery. Five wetlands correspond to wetlands mapped by NWI and Kitsap County. Most wetlands contain multiple Cowardin classes and typically dominated by Douglas spiraea. All 11 wetlands are depressional under the hydrogeomorphic (HGM) classification. The delineated wetlands are described in Table 4 and shown on Figure 2. Tables 5 through 16 provide details for each wetland.

<sup>&</sup>lt;sup>1</sup> NWI class based on vegetation and water regime. PSSC = palustrine scrub-shrub, seasonally flooded; PEM1/UBF = palustrine emergent persistent/unconsolidated bottom, semi permanently flooded; PEM1C = palustrine emergent persistent, seasonally flooded; PUBH = palustrine unconsolidated bottom, permanently flooded; PABH = palustrine aquatic bed, permanently flooded.



Table 4: Summary of DOWL-Mapped Wetlands in the Study Area

Wetland Name	Cowardin Class <sup>2</sup>	HGM Class³	Rating⁴	Habitat Score	Size (acres)	Standard Buffer Width (feet) <sup>5</sup>
1	PEM, PSS	Depression al	III	7	7.35	150
2	PEM	Depression al	III	7	1.03	150
3	PSS	Depression al	IV	5	0.05	50
4	PEM, PSS, PAB	Depression al	Ш	8	7.11	300
5	PEM, PSS, PFO	Depression al	Ш	7	10.32	150
6	PEM, PSS	Depression al	Ш	7	2.15	150
7	PSS	Depression al	III	5	0.70	80
8	PSS	Depression al	III	7	0.02	150
9	PSS, PFO	Depression al	III	7	0.59	150
10	PEM, PSS	Depression al	III	6	0.14	150
11	PEM, PSS	Depression al	III	5	0.30	80
12	PEM	Depression al	III	5	1.71	80

<sup>&</sup>lt;sup>5</sup> City of Bremerton wetland buffer width based on wetland category and habitat score (BMC 20.14.330. h.1).



<sup>&</sup>lt;sup>2</sup> NWI class based on vegetation: PFO = palustrine forested, PSS = palustrine scrub-shrub, PEM = palustrine emergent (Cowardin et al., 1979).

<sup>&</sup>lt;sup>3</sup> Hydrogeomorphic class.

<sup>&</sup>lt;sup>4</sup> City of Bremerton wetland rating (BMC 20.14.320).

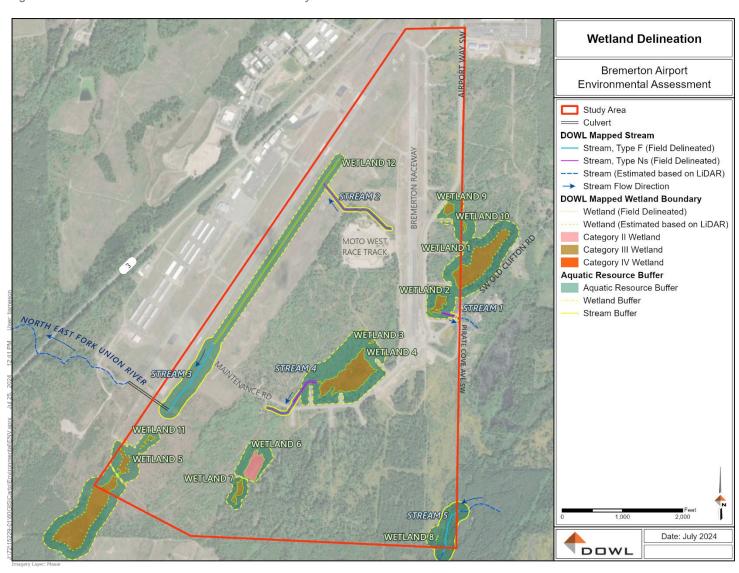


Figure 2. Wetlands and Streams Delineated by DOWL



Table 5: Wetland 1 Summary

	Wetland 1 Summary
Location	Eastern edge of study area, north of SW Old Clifton Road and south of Wetland 10. Wetland 1 corresponds to NWI-mapped six-acre PSS1C wetland.
Photo Caption South-facing view, photographed from northern edge of wetland at study area boundary	



Local Jurisdiction	City of Bremerton
Rating	Category III
Buffer Width	150 feet
Wetland Size	7.35 acres
Cowardin Class	PSS, PEM
HGM Class	Depressional
Wetland Data Sheet(s)	W1-SP1
Upland Data Sheet(s)	W1-SP2

		011000(0)					
	Trees	None					
Vegetation	Shrubs	Douglas spiraea, Pacific willow					
	Herbs	Reed canarygrass, sedge (Carex sp.), simplestem bur-reed (Sparganium emersum)					
	0-9 inches	10YR 2/1 muck, 100%					
Soils	9-10 inches	2.5YR 3/2 muck, 100%					
Solis	10-16 inches	0YR 3/6 mucky silt loam, 98% YR 4/6 redox concentrations in pore linings, 2%					
	Indicators Met	Histosol (A1)					
Hydrology	Wetland 1 does n Ditched channels	ation is the primary source of hydrology. ot have an outlet carry water from the permanently ponded area to the edge of the wetland but do not e wetland boundary and do not act as outlets.					
	Indicators Met	Oxidized Rhizospheres on Living Roots (C3), Geomorphic Position (D2), FAC-Neutral Test (D5)					
	Water Quality	No outlet, organic soils, high percentage of plant cover, moderate amount of seasonal ponding, no stormwater inputs, nearby septic systems, other pollutants; located in basin containing a TMDL					
Functions	Hydrology	No outlet, low amount of live storage, small and undeveloped contributing basin, no stormwater inputs, no downstream flooding					
	Habitat	Low structural diversity, moderate hydrologic diversity, moderate species diversity, moderate habitat interspersion, moderate special features, high connectivity, some nearby WDFW priority habitats					
Buffer Condition	Dominant vegetat The southwest an mowed residentia	ouffer was overall in good condition and provides screening and habitat functions. tion: Douglas-fir, shore pine ( <i>Pinus contorta</i> ), red alder; salal, evergreen huckleberry and southeast buffer is constricted by paved roads. The northeast buffer contains a layard.  The present near roads and includes Himalayan blackberry and reed canarygrass.					



Table 6: Wetland 2 Summary

rable 6. Welland 2 Gammary				
Wetland 2 Summary				
Location	Near eastern edge of the study area at the intersection of Southwest Old Clifton Road and Airport Way Southwest. Southwest of Wetland 1. Corresponds to NWI-mapped one-acre PABH wetland			
Photo Caption	North-facing view of Wetla	and 2 from southern bound	lary	
		Local Jurisdiction	City of Bremerton	
		Rating	Category III	
		Buffer Width	150 feet	
		Wetland Size	1.03 acres	
		Cowardin Class	PSS, PEM, PAB	
<b>建物的</b>	A STATE OF THE STA	HGM Class	Depressional	
		Wetland Data Sheet(s)	W2-SP1	
		Upland Data Sheet(s)	W2-SP2	
	Trees None			
Vegetation	Shrubs Douglas spiraea			
	Herbs Reed canaryg		non cattail, field horsetail	
	0-2 inches	10YR 2/1 muck, 100%		
Soils	2-16 inches	2.5Y 4/2 sandy loam, 95% 7.5YR 4/6 concentrations in the matrix, 5%		
	Indicators Met	Depleted Below Dark Surface (A11), Depleted Matrix (F3)		
Hydrology		ecipitation are the primary sently flowing outlet that is c		
	Indicators Met	High Water Table (A2), Saturation (A3)		
	Water Quality	Intermittently flowing outlet, low plant cover, moderate seasonal ponding, stormwater inputs basin of TMDL		
Functions	Hydrology	Intermittently flowing outlet, moderate live storal moderate and undeveloped contributing basin, stormwater inputs, no downstream flooding		
	Habitat	Low structural diversity, n diversity, moderate speci- habitat interspersion, moderate high connectivity, moderate habitats	es diversity, moderate	
Buffer Condition	Forested buffer is constricted by Airport Way SW to the south, and Old Clifton Road to the south and east. Because of the proximity to developed areas, a lot of trash and other debris was observed in the buffer.  Dominant vegetation: red alder; osoberry ( <i>Oemleria cerasiformis</i> ), reed canarygrass			



Table 7: Wetland 3 Summary

Table 7: Wetland 3 Summary			
Wetland 3 Summary			
Location	Center of study area between runway and Bremerton Raceway, northeast of Wetland 4 Not mapped by NWI or Kitsap County.		
Photo Caption	Southeast-facing from nor	thwest wetland edge	
	4.	Local Jurisdiction	City of Bremerton
	A 4466	Rating	Category IV
	V AND W	Buffer Width	50 feet
	THE RESERVE TO SERVE	Wetland Size	0.05 acre
		Cowardin Class	PSS
	火纵、海红	HGM Class	Depressional
		Wetland Data Sheet(s)	W3-SP1
	MAN CONTRACTOR	Upland Data Sheet(s)	W3-SP2
	Trees	None	
Vegetation	Shrubs	Douglas spiraea	
	Herbs Reed canarygrass, slough sedge		sedge
	0-7 inches	10YR 2/1 silt loam, 100%	
Soils	7-9 inches	10YR 4/4 silt clay loam, 100%	
00113	9-16 inches	10YR 4/1 silt clay loam, 93% 7.5YR 5/8 redox concentrations in the matrix, 7%	
	Indicators Met	Depleted Matrix (F3)	
Hydrology	Precipitation is the primary No outlet, no surface conn		
	Indicators Met	Saturation (A3)	
	Water Quality	No outlet, high percentage of plant cover, no seasonal ponding, no stormwater inputs, no pollutants, in basin containing a 303(d) listed wat (North East Fork Union River) and a TMDL	
Functions	Hydrology	No outlet, low percentage of seasonal ponding, moderate and undeveloped contributing basin, no stormwater inputs, no downstream flooding	
	Habitat	Low structural diversity, lo moderate species diversity interspersion, no special for no WDFW priority habitats or state-listed species	y, no habitat eatures, high connectivity,
Buffer Condition	Forested buffer traversed by infrequently used fire access roads in northeast buffer. Overall intact and in good condition.  Dominant vegetation: Douglas-fir, red alder; evergreen huckleberry, salal, cutleaf blackberry		



Table 8: Wetland 4 Summary

Table 8: Wetland 4 Summary				
Wetland 4 Summary				
Location	Location Center of study area, southwest of Wetland 3 Corresponds to NWI-mapped seven-acre PEM1C and PUBH wetland			
Photo Caption	Southwest-facing view of W	Southwest-facing view of Wetland 4 from northeast wetland edge		
		Local Jurisdiction	City of Bremerton	
		Rating	Category II	
		Buffer Width	300 feet	
		Wetland Size	7.11 acres	
		Cowardin Class	PEM, PSS, PAB	
		HGM Class	Depressional	
		Wetland Data Sheet(s)	W4-SP1, W4-SP3, W4-SP5	
	A SAGAR	Upland Data Sheet(s)	W4-SP2, W4-SP4, W4-SP6	
	Trees	None		
Vegetation	Shrubs	Douglas spiraea		
	Herbs	Reed canarygrass, soft rush, floating pondweed ( <i>Potamogeton natans</i> ), simplestem bur-reed, yellow pond lily ( <i>Nuphar polysepala</i>		
	0-8 inches	10YR 2/1 muck, 100%		
Soils	8-16 inches	10YR 4/1 clay, 74% 7.5YR 4/6 redox concentrations in the matrix, 25% 2.5Y 5/6 redox concentrations in the matrix, 1%		
	Indicators Met	Histic Epipedon (A2), Black Histic (A3), Depleted Below Dark Surface (A11), Depleted Matrix (F3)		
Hydrology		irce s constricted by beaver dams ponded area with evidence		
	Indicators Met	High Water Table (A2), Sat Living Roots (C3), FAC-Ne	uration (A3), Oxidized Rhizospheres on utral Test (D5)	
	Water Quality	Intermittently flowing outlet, organic soils, moderate percentage or plant cover, moderate seasonal ponding, stormwater inputs, waterfowl use, in basin of 303(d) (North East Fork Union River) at TMDL		
Functions	Hydrology		moderate live storage, small and asin, no downstream flooding	
	Habitat	moderate species diversity,	y, moderate hydrologic diversity, high habitat interspersion, moderate ectivity, many nearby WDFW priority	
Buffer Condition	Buffer is constricted by paved maintenance roads in south, east, and west buffer, unpaved fire access roads in north buffer.  Overall, the forested buffer provides good habitat and contains a stream (Stream 4).  Dominant vegetation: Douglas-fir, red alder; salal, evergreen huckleberry, Himalayan blackberry			



Table 9: Wetland 5 Summary			
	Wetland	l 5 Summary	
Location	Southwest corner of study area. Partially extends outside study area.  Corresponds to NWI-mapped eight-acre PSSC and PEM1/UBF wetland		
Photo Caption	North-facing view of Wetl	and 5, approximately 50 ya	rds south of gravel road
		Local Jurisdiction	City of Bremerton
		Rating	Category II
A 1 2 2 2 2 3 7 1		Buffer Width	150
<b>为认为我们</b>		Wetland Size	10.32 acres
		Cowardin Class	PEM, PSS, PFO
	多数等	HGM Class	Depressional
		Wetland Data Sheet(s)	W5-SP1, W5-SP3
		Upland Data Sheet(s)	W5-SP2
	Trees	Red alder	
Vegetation	Shrubs	Douglas spiraea, Scouler's willow (Salix scouled bog labrador tea (Rhododendron groenlandice	
	Herbs	Slough sedge, field horsetail, reed canarygrass	
	0-7 inches	10YR 2/2 silt loam, 95% 7.5YR 4/6 redox concentr	rations in the matrix, 5%
Soils	7-16 inches	10YR 2/1 silt loam, 99% 10YR 5/8 redox concentrations in the matrix, 1%	
	Indicators Met	Redox Dark Surface (F6)	
Hydrology		orth wetland boundary not	found; no outlet ects north and south parts of
	Indicators Met	Saturation (A3), Hydroger Neutral Test (D5)	n Sulfide Odor (C1), FAC-
	Water Quality	No outlet, high plant cover, high seasonal ponding, stormwater inputs, in basin of 303(d) (North East Fork Union River) and TMDL	
Functions	Hydrology	No outlet, moderate live storage, small and undeveloped contributing basin, no downstream flooding	
	Habitat	Moderate structural diversity, moderate hydrologic diversity, moderate species diversity, high habitat interspersion, moderate special features, high connectivity, moderate nearby WDFW priority habitats	
Buffer Condition	The northern portion of the buffer includes the maintained runway safety area (mown non-native grasses and Scotch broom). The buffer to the east and west is previously disturbed shrubland. The buffer is forested to the south. A gravel road bisects the wetland and the wetland buffer.		

Dominant vegetation: Scotch broom, salal, bracken fern; young western hemlock,

Douglas-fir, noble fir (Abies procera)



Table 10: Wetland 6 Summary

Table To. Welland o Summary				
Wetland 6 Summary				
Location	South of the paved maintenance road near the center of the southern portion of the study area; north of Wetland 7 Corresponds to north part of NWI-mapped four-acre PSSC wetland			
Photo Caption	North-facing view from ce	nter of eastern wetland ed	ge	
		Local Jurisdiction	City of Bremerton	
		Rating	Category II	
		Buffer Width	150 feet	
		Wetland Size	2.15 acres	
		Cowardin Class	PEM, PSS	
	2012	HGM Class	Depressional	
		Wetland Data Sheet(s)	W6-SP1	
		Upland Data Sheet(s)	W6-SP2	
	Trees	None		
Vegetation	Shrubs	Douglas spiraea		
	Herbs	Slough sedge		
	0-9 inches	10YR 2/1 muck, 100%		
Soils	9-16 inches	7.5YR 3/2 silt loam/muck, 90% 2.5Y 4/3 redox concentrations in the matrix, 10%		
	Indicators Met	Histic Epipedon (A2), Black Histic (A3)		
Hydrology	No outlet	water are primary sources of the stand 6 prevents surface of		
	Indicators Met	High Water Table (A2), F	AC-Neutral Test (D5)	
	Water Quality	No outlet, organic soils, high plant cover, high seasonal ponding, stormwater inputs, in basin o 303(d) (North East Fork Union River) and TMDL		
Functions	Hydrology	No outlet, moderate live storage, small and intact contributing basin, no downstream flooding		
	Habitat	Moderate structural and species diversity, low habitat interspersion, moderate special features, high connectivity, few nearby WDFW priority habitats		
Buffer Condition	Forested buffer is transected by a infrequently used dirt maintenance road. Dominant vegetation: Douglas-fir, western hemlock, western white pine; salal, spiraea, evergreen huckleberry, trailing blackberry			



Table 11: Wetland 7 Summary

Table 11. Welland 7 Summary				
Location	Center of southern part of the study area, south of Wetland 6 Corresponds to southern portion of NWI-mapped four-acre PSSC wetland			
Photo Caption	East-facing view of Wetla	nd 7 from its northwest cor	ner	
		Local Jurisdiction	City of Bremerton	
		Rating	III	
The second second	100 717	Buffer Width	80 feet	
		Wetland Size	0.70 acres	
		Cowardin Class	PSS	
	的意识人以	HGM Class	Depressional	
		Wetland Data Sheet(s)	W7-SP1	
		Upland Data Sheet(s)	W7-SP2	
	Trees	None		
Vegetation	Shrubs	Douglas spiraea, western crabapple (Malus fusca)		
	Herbs	Slough sedge, sphagnum	moss ( <i>Sphagnum sp.</i> )	
	0-7 inches	10YR 2/1 muck, 100%		
Soils	7-16 inches	5YR 3/4 silt loam, 100%		
	Indicators Met	Hydrogen Sulfide (A4)		
Hudrology	Runoff is primary water so No outlet; gravel road to r	ource north prevents surface conr	nection to Wetland 6	
Hydrology	Indicators Met	High Water Table (A2), Saturation (A3), Hydrog Sulfide Odor (C1), FAC-Neutral Test (D5)		
	Water Quality	No outlet, organic soil, high plant cover, high seasonal ponding, stormwater inputs, in basin of 303(d) (North East Fork Union River) and TMDL		
Functions	Hydrology	No outlet, moderate live storage, small and undeveloped contributing basin, stormwater inputs, no downstream flooding		
	Habitat	Low structural diversity and habitat interspersion, low species diversity, few special features, high connectivity, few nearby WDFW priority habitats		
Buffer Condition	Forested buffer transected by infrequently used dirt road (to the north) Dominant vegetation: Douglas-fir, western hemlock, western white pine; salal, spiraea, evergreen huckleberry, trailing blackberry			



Table 12: Wetland 8 Summary

rable 12. Welland 6 Summary				
Wetland 8 Summary				
Location	Southeast corner of study area, west of Stream 5 Not mapped by NWI or Kitsap County			
Photo Caption	North-facing view of Wetland 8 from its center			
		Local Jurisdiction	City of Bremerton	
		Rating	III	
THE WARRY		Buffer Width	150 feet	
		Wetland Size	0.02 acres	
	A STATE OF THE STA	Cowardin Class	PSS	
		HGM Class	Depressional	
		Wetland Data Sheet(s)	W8-SP1, W8-SP3	
		Upland Data Sheet(s)	W8-SP2	
	Trees None			
Vegetation	Shrubs	Douglas spiraea	uglas spiraea	
	Herbs	Slough sedge, haircap moss ( <i>Polytrichastrum sp.</i> )		
	0-6 inches	10YR 2/1 silt loam, 93% 10YR 3/1 redox concentrations in the matrix, 7%		
Soils	6-12 inches	10YR 4/2 sand, 100%		
	Indicators Met	Problematic hydric soils (Seasonally Ponded Soils)		
Hydrology	Precipitation is primary so No outlet No surface connection to			
,	Indicators Met	Surface Water (A1), High Water Table (A2), Saturation (A3)		
	Water Quality	No outlet, high plant cover, high seasonal ponding no stormwater input, in basin of TMDL		
Functions	Hydrology	No outlet, low live storage, moderate and intact contributing basin, no stormwater input, no downstream flooding		
	Habitat	Low structural diversity and habitat interspersion, low species diversity, few special features, high connectivity, many nearby WDFW priority habitats		
Buffer Condition	The forested buffer is in good condition and includes a stream (Stream 5) and riparian forest.  Dominant vegetation: Western hemlock, Douglas-fir, western white pine, cascara ( <i>Frangula purshiana</i> ); evergreen huckleberry, salal, bracken fern, sword fern, some Scotch broom			



Table 13: Wetland 9 Summary

	Table 13. Wella	and 9 Summary		
	Wetland 9 Summary			
Location	East of Airport Way SW and northwest of Wetland 10 Not mapped by NWI or Kitsap County.			
Photo Caption	North-facing view of Wetl	and 9 from south wetland e	dge	
		Local Jurisdiction	City of Bremerton	
MARKAN		Rating	III	
	上文本文学	Buffer Width	150 feet	
	Edward Villa	Wetland Size	0.59 acres	
		Cowardin Class	PSS, PFO	
	了一家学训	HGM Class	Depressional	
		Wetland Data Sheet(s)	W9-SP1	
		Upland Data Sheet(s)	W9-SP2	
	Trees Sitka willow			
Vegetation	Shrubs Douglas spiraea, red alder, western crabap		er, western crabapple	
	Herbs Slough sedge			
	0-8 inches 10YR 2/1 silt loam, 100%			
Soils	8-16 inches	10YR 2/2 silt loam, 95% 10YR 4/6 redox concentrations in the matrix, 5%		
	Indicators Met	Redox Dark Surface (F6)		
	Runoff and precipitation a No outlet	re primary sources of hydro	ology.	
Hydrology	Indicators Met	Sparsely Vegetated Cond Stained Leaves (B9), Ged FAC-Neutral Test (D5)		
	Water Quality	No outlet, high plant cove ponding, receives stormw buffer, located in basin co	ater, development in	
Functions	Hydrology	No outlet, low live storage, large contributing basin, no downstream flooding		
	Habitat  Low structural diversity and habitat interspersi moderate species diversity, moderate special features, high connectivity, few nearby WDFW priority habitats			
Buffer Condition	The buffer is constricted by paved roads to the west and south. The western buffer is dominated by mowed non-native grasses on the road prism of Airport Way SW.  The buffer is intact upland forest to the east and north.  Dominant vegetation: Western hemlock, Douglas-fir; salmonberry ( <i>Rubus spectabilis</i> ), salal, evergreen huckleberry, trailing blackberry, cascara			



Table 14: Wetland 10 Summary

rabio 11. Wolland to Cammary				
Wetland 10 Summary				
Location	East of Airport Way Southwest and in between Wetland 9 (to the north) and Wetland 1 (to the south). Not mapped by NWI or Kitsap County.			
Photo Caption	North-facing view from center of east wetland edge			
		Local Jurisdiction	City of Bremerton	
		Rating	III	
		Buffer Width	150 feet	
<b>多文化学概念</b>		Wetland Size	0.14 acres	
<b>医</b> 介质 海菜		Cowardin Class	PEM, PSS	
<b>美国人主义</b>		HGM Class	Depressional	
	<b>人</b> 加拉克斯斯	Wetland Data Sheet(s)	W10-SP1	
		Upland Data Sheet(s)	W10-SP2	
	Trees	None		
Vegetation	Shrubs	Douglas spiraea, Sitka willow		
	Herbs	Slough sedge, soft rush, reed canarygrass, haircap moss		
	0-4 inches	10YR 2/1 silt loam, 100%		
	4-6 inches	10YR 3/2 gravelly silt loam, 100%		
Soils	6-16 inches	2.5Y 4/2 sand, 95% 10YR 4/6 redox concentrations in the matrix, 5%		
	Indicators Met	Depleted Below Dark Surface (A11), Sandy Redox (S5)		
Hudrology	Groundwater and season No outlet	al precipitation are primary	sources of hydrology.	
Hydrology	Indicators Met	High Water Table (A2), Geomorphic Position (D2) FAC-Neutral Test (D5)		
	Water Quality	No outlet, high percentage of plant cover, high percentage of seasonal ponding, no stormwater inputs, in basin containing TMDL		
Functions	Hydrology	No outlet, low live storage, moderate and intact contributing basin, no stormwater inputs, no downstream flooding		
	Habitat	Low structural diversity and habitat interspersion, low species diversity, few special features, high connectivity, few nearby WDFW priority habitats		
Buffer Condition	Forested buffer is intact and overall, in good condition.  Dominant vegetation: red alder, western crabapple, western white pine,  Douglas-fir; evergreen huckleberry, salal, bracken fern, some Himalayan blackberry and cutleaf blackberry			



Table 15: Wetland 11 Summary

	7 4 5 7 6 7 6 7 7 7 6	lianu i i Summary		
Location	Southwest portion of the study area. Wetland 11 is southeast of the runway and inside the runway fence. Wetland 11 is north of Wetland 5 and south of Stream 3.  Not mapped by NWI or Kitsap County			
Photo Caption	East-facing view from we	stern edge of wetland		
		Local Jurisdiction	City of Bremerton	
	7. 万克纳克温克	Rating	III	
		Buffer Width	80 feet	
		Wetland Size	0.30 acres	
	() 使代码	Cowardin Class	PEM, PSS	
EV WEST		HGM Class	Depressional	
	在學樣和研	Wetland Data Sheet(s)	W11-SP1	
	人。一直接入了	Upland Data Sheet(s)	W11-SP2	
	Trees	None		
Vegetation	Shrubs	Douglas spiraea, Pacific willow		
	Herbs	Slough sedge, reed canarygrass		
	0-12 inches	10YR 3/3 sand, 95% 10YR 3/4 redox concentrations in the matrix, 5%		
Soils	Indicators Met	Problematic Hydric Soils (Other – Soils assumed to be hydric based on presence of hydrophytic vegetation, amount of saturation and location within a depression that contained ponded water)		
	Groundwater and precipit No outlet	ation are primary sources o	of hydrology.	
Hydrology	Indicators Met	Surface Water (A1), High (A3), FAC-Neutral Test (E	Water Table (A2), Saturation (D5)	
	Water Quality	No outlet, high percentage of plant cover, high area of		
Functions	Hydrology	No outlet, moderate live storage, moderate and developed contributing basin, runoff inputs, no downstream flooding		
	Habitat	Low structural diversity and habitat interspersion, moderate species diversity, no special features, high connectivity, no nearby WDFW priority habitats		
Buffer Condition	The western and northern portions of the buffer include the maintained runway safety area (mown non-native grasses and Scotch broom).  The buffer is previously disturbed shrubland to the east and south.  Dominant vegetation: Scotch broom, salal, evergreen huckleberry, trailing blackberry; some red alder and western hemlock			



Table 16: Wetland 12 Summary

Wetland 12 Summary				
Location	East of the runway and north of Stream 3.			
Photo Caption	Southwest facing view from northern end of wetland			
		Local Jurisdiction	City of Bremerton	
		Rating	III	
	THE PART NA	Buffer Width	80 feet	
		Wetland Size	1.71	
		Cowardin Class	PEM	
Marie Control of the	Michigan Comment	HGM Class	Depressional	
		Wetland Data Sheet(s)	W12-SP1	
White Carlot and the	a diposis	Upland Data Sheet(s)	W12-SP2	
	Trees	None		
Vegetation	Shrubs	None		
Herbs Soft rush, slough see		Soft rush, slough sedge, i	ge, reed canarygrass	
	0-1 inch	10YR 3/2, 100% sandy silt loam		
Soils	1-9 inches	Mixed matrix of 60% 10YR 5/1 and 30% 10YR 4/3 and 10% redox concentrations in the matrix (Could not dig beyond 9 inches because of hardpan layer)		
	Indicators Met	Depleted Below Dark Surface (A11) and Sandy Redox (S5)		
Hydrology			ces of hydrology. Wetland 12 capture runoff. Wetland 12	
, 0,	Indicators Met	High Water Table (A2), S. Test (D5)	aturation (A3), FAC-Neutral	
Water Quali		Wetland is intermittently flowing, high percentage of plant cover, high area of seasonal ponding, pollution inputs, is in a basin containing a 303(d) listed water (North East Fork Union River) and a TMDL		
Functions	Hydrology	Wetland is intermittently flowing, has moderate live storage, moderate and developed contributing basin, runoff inputs, no downstream flooding		
	Habitat	Low structural diversity ar moderate species diversit connectivity, no nearby W	ty, no special features, high	
Buffer Condition	The wetland buffer is entirely within the maintained runway safety area (mowed grasses and Scotch broom). The culvert at the north end is overgrown with cutleaf blackberry.			



#### 3.4 Streams

## 3.4.1 Desktop Review

DNR Forest Practices Application Mapping Tool (DNR 2023a) and Kitsap County (Kitsap County 2023) map six streams in the study area. These are listed in Table 17 and shown in Attachment A, Figures 3 and 4.

Table 17: Summary of Previously Mapped Streams in the Study Area

Stream Name (DNR Stream ID)	Flows To	DNR Water Type <sup>6</sup>	Location
North East Fork Union River (202222)	Hood Canal	Type U in upper 350 feet Type N in middle 900 feet Type F in lower 280 feet	The North East Fork flows west out of the NWI mapped 7-acre PEM1C / PUBH wetland southeast of the main runway. As the North East Fork passes the main runway it becomes a Type F stream, flowing west for about 2300 feet until it crosses State Route 3 and exits the study area.
Unnamed Stream 1 (202144)	North East Fork Union River	Type N in upper 1,100 feet Type F in lower 4,500 feet	This stream is east of and parallel to the main runway, flowing southwest into the North East Fork where the North East Fork transitions from Type N to Type F.
Tributary 1 to Unnamed Stream 1 (201939)	Unnamed Stream 1	Type N	This stream flows about 1,300 feet west into Unnamed Stream 1 near the north end of the runway.
Tributary 2 to Unnamed Stream 1 (202217)	Unnamed Stream 1	Type N	This stream flows about 2,300 feet west from a wetland into Unnamed Stream 1 near the south end of the runway.
Unnamed Stream 2 (202132)	North East Fork Union River	Type U	This stream flows about 1,300 feet north from a wetland into the lower end of the Type N reach of the North East Fork.
Unnamed Stream 3 (202377)	Coulter Creek	Type N in upper 350 feet Type F in lower 550 feet	This stream flows through the study area in two separate places. A Type N reach of the stream flows south from a wetland along the study area's east edge for about 350 feet. A Type F reach flows southwest through the study area's southeast corner for about 550 feet.

<sup>6.</sup> Department of Natural Resources Forest Practices Water Type: Type F = Fish: Streams and waterbodies that are known to be used by fish, or meet the physical criteria to be potentially used by fish. Fish streams may or may not have flowing water all year; they may be perennial or seasonal. Type Np = Non-Fish: "Streams that have flow year round and may have spatially intermittent dry reaches downstream of perennial flow. Type Np streams do not meet the physical criteria of a Type F stream. This also includes streams that have been proven not to contain fish using methods described in Forest Practices Board Manual Section 13." Type Ns = Non-Fish Seasonal: "Streams that do not have surface flow during at least some portion of the year, and do not meet the physical criteria of a Type F stream.". Type U is a symbol on DNR maps that identifies unknown water features that need to be verified and identified on proposed forest practices activity maps.



## 3.4.2 Field Investigation

The field investigation, conducted in October and November 2023, identified and delineated the ordinary high water mark (OHWM) of five streams, within the study area. These are shown on Figure 2 and listed in Table 18. Table 19 through Table 23 provides details for each stream.

Table 18: Summary of Streams Delineated in the Study Area

Stream Name	Connections	DNR Water Type <sup>2</sup>	Buffer Width (feet) <sup>3</sup>
Stream 1	NWI mapped wetland outside study area	Ns	35
Stream 2	Stream 2 connects directly to Stream 3 which outlets to the North East Fork Union River	Ns	35
Stream 3	North East Fork Union River	F <sup>4</sup>	150
Stream 4	Stream 4 is an outlet of Wetland 4 and flows through a culvert under the maintenance road and then flows for a short distance toward another maintenance road and then infiltrates into groundwater.	Ns	35
Stream 5	Coulter Creek	F	150



Table 19: Stream 1 Summary

## **Stream 1 Summary** South-facing view of Stream 1 from the left bank, halfway **Photo Description** between where the stream outlets from Wetland 2 and the culvert under SW Old Clifton Road. Stream Name Stream 1 Water Resource Inventory 15 Area **Local Jurisdiction** City of Bremerton **DNR Stream ID** 202132 **DNR Stream Type** Ns **Kitsap County Stream Type** Ns **Buffer Width** 35 Stream 1 flows east from Wetland 2, passes through a nine-footwide culvert under SW Old Clifton Road, empties into a rock lined Connectivity pool, then exits the study area through a 2-foot-wide culvert under Pirates Cove Avenue SW. Stream 1 outlets into the 7-acre NWImapped PEM1C/PUBH wetland outside study area. **Documented Fish Use** None Stream 1 is a low-gradient, relatively straight channel with steep banks and beaver dams. The channel is approximately eight feet wide. The channel substrate is predominantly sediment with some cobbles near outlet of SW Old Clifton Road culvert. The stream In-Stream Habitat contained pools up to two feet deep, but no flow was documented during the October 2023 site visit. Portions of channel are shaded by overhanging trees and shrubs. Vegetation in channel: reed canarygrass (*Phalaris arundinacea*), common cattail (*Typha latifolia*) Before crossing through the SW Clifton Road culvert, the riparian habitat is forested. Dominant vegetation: Red alder (Alnus rubra), evergreen huckleberry (Vaccinium ovatum), sword fern (Polystichum munitum), Scotch broom (Cytisus scoparius), Himalayan blackberry (Rubus armeniacus), bigleaf maple (Acer macrophyllum) Riparian Habitat Once crossing through the SW Clifton Road culvert, the riparian corridor is significantly disturbed and constricted by SW Old Clifton Road and other residential development. This section of the riparian corridor is vegetated with Himalayan blackberry and mowed nonnative grasses in residential lawns.



Table 20: Stream 2 Summary

	Stream 2 Summary				
Photo Description	West-facing view of Stream 2 showing the culvert which crosses under a dirt trail and the runway fence				
TO TO	Stream Name	Stream 2			
	Water Resource Inventory Area	15			
	Local Jurisdiction	City of Bremerton			
	DNR Stream ID	201939			
	DNR Stream Type	Ns			
	Kitsap County Stream Type	Ns			
	Buffer Width	35			
Connectivity	Stream 2 originates in a ravine north of the MotoWest Race Track. Stream 2 flows through a culvert under a dirt trail and runway fence. After exiting this culvert, Stream 2 travels through a straight channel and then connects via a second culvert to Wetland 12.				
Documented Fish Use	None				
In-Stream Habitat	Stream 2 has intermittent flow. DOWL observed no flow and no water during the October 2023 site visit. Stream 2 does not contain any instream habitat features. The channel is intermittently defined. The channel substrate is predominantly silt loam. Channel width ranges from one to four feet.				
	Stream 2's riparian habitat within the ravine, east of the runway fence, is upland forest.				
	Vegetation on the ravine floor includes Douglas spiraea ( <i>Spiraea douglasii</i> ), slough sedge ( <i>Carex obnupta</i> ), water parsley ( <i>Oenanthe sarmentosa</i> ), creeping buttercup ( <i>Ranunculus repens</i> ), reed canarygrass, and Sitka willow.				
Riparian Habitat	Vegetation on the ravine slopes includes red alder, Douglas-fir (Pseudotsuga menziesii), western white pine (Pinus monticola), madrone (Arbutus menziesii), English holly (Ilex aquifolium), trailing blackberry (Rubus ursinus), cutleaf blackberry (Rubus laciniatus), black cottonwood (Populus balsamifera), low Oregon grape (Mahonia nervosa), and bittersweet nightshade (Solanum dulcamara).				
	Once Stream 2 emerges west of the runway fence, the riparian corridor is significantly disturbed and is maintained according to airport regulations. Vegetation includes mown non-native grasses, Scotch broom, and bracken fern ( <i>Pteridium aquilinum</i> ).				



Table 21: Stream 3 Summary

rable 21. Girdam o Gammary					
Stream 3 Summary					
Photo Description	North-facing view of Stream 3 from right bank, upstream of maintenance road				
	Stream Name	North East Fork Union River / Stream 3			
	Water Resource Inventory Area	15			
	Local Jurisdiction	City of Bremerton			
	DNR Stream ID	202144			
	DNR Stream Type	F			
	Kitsap County Stream Type	F			
	Buffer Width	150			
Connectivity	Stream 3 is east of the runway and south of Wetland 12. Stream 3 flows south, parallel to the runway, before turning west, entering a culvert, and emerging west of the runway. Stream 3 then leaves the airport property, crosses through a culvert under State Route 3, and outlets to the North East Fork Union River.				
Within the project area, the North East Fork Union River (Stream 3) mapped by the Statewide Integrated Fish Distribution and WDFW's Priority Habitat and Species (PHS) map as potential habitat for cohe salmon ( <i>Oncorhynchus kisutch</i> ), also listed as threatened. PHS also maps resident coastal cutthroat trout ( <i>Oncorhynchus clarkii</i> ) a occurring in the North East Fork Union River within the project area  NOAA Fisheries maps the North East Fork Union River (approximat 1 mile downstream of, and entirely outside, the project area) as criti habitat for Hood Canal summer run chum salmon ( <i>Oncorhynchus keta</i> ), listed as threatened under the Endangered Species Act (ESA A culvert which has been identified as a barrier to fish passage (WDFW ID 991728) prevents fish access to the reach within the project area.					
In-Stream Habitat	Stream 3 is a straight channel, approximately 20 feet wide, with limited habitat features. The channel substrate is sand and some cobbles. Flow was observed during the November 2023 site visit, but no water was present during the October 2023 site visit. Vegetation in the channel includes Pacific willow ( <i>Salix lasiandra</i> ), reed canarygrass, and soft rush ( <i>Juncus effusus</i> ).				
Riparian Habitat	Because of the stream's proximity to the airport runway, the riparian corridor is significantly disturbed and is regularly mowed. The vegetation is dominated by scotch broom, grasses, and herbaceous species including velvet grass (Holcus lanatus), field horsetail (Equisetum arvense), hairy cat's-ear (Hypochaeris radicata), and lanceleaf plantain (Plantago lanceolata). Pacific willow, black cottonwood, red alder, and Douglas spiraea are present along the channel edge. Reed canarygrass, soft rush, and slough sedge are present in the channel.				



Table 22: Stream 4 Summary

rable 22. Stream 4 Summary						
Stream 4 Summary						
Photo Description	West-facing view of Stream 4 from left bank at upper end of stream					
1 Marcon	Stream Name	Stream 4				
	Water Resource Inventory Area	15				
	Local Jurisdiction	City of Bremerton				
A PANA	DNR Stream ID	202217				
	DNR Stream Type	Ns				
	Kitsap County Stream Type	Ns				
	Buffer Width	35				
Connectivity	Stream 4 outlets from Wetland 4, flows through a culvert under a paved maintenance road, turns west, and ends at the edge of a gravel maintenance road before infiltrating into groundwater. Though NHD and Kitsap County maps show the stream outlets to Stream 3, DOWL found no evidence of a channel beyond the gravel maintenance road. However, airport maintenance staff provided documentation that Stream 4 does outlet to Stream 3.					
Documented Fish Use	None					
In-Stream Habitat	The channel is relatively straight. Four beaver dams, averaging four feet in height, are present in the channel between Wetland 4 and the culvert. DOWL found ponded areas two to three feet deep between the dams, but no flow was observed during the October site visit. Between the lower two dams and the culvert, the channel is poorly defined and vegetated with reed canarygrass. At the outlet from Wetland 4, the channel is about 20 feet wide and narrows to 10 feet before the culvert. South of the paved maintenance road, Stream 4 enters a ravine where the channel is approximately 2 to 3 feet wide.					
Riparian Habitat	The riparian corridor is somewhat constricted by the paved maintenance road and dirt fire access roads. There are some standing snags and downed logs that provide habitat. Native vegetation including western hemlock ( <i>Tsuga heterophylla</i> ), red alder, and sword fern is interspersed with invasive species including Himalayan blackberry, cutleaf blackberry and reed canarygrass.					



Table 23: Stream 5 Summary

rable 20. Girdam o Gammary									
	Stream 5 Summary								
Photo Description	East-facing view of Stream 5 at eastern study area boundary								
	Stream Name	Stream 5							
	Water Resource Inventory Area	15							
	Local Jurisdiction	City of Bremerton							
	DNR Stream ID	202377							
	DNR Stream Type	F							
<b>表。《传》</b>	Kitsap County Stream Type	F							
	Buffer Width	150							
Connectivity	NHD maps Stream 5 as originating acre PEM1C/PUBH wetland (outsioutlet for Stream 2. DOWL assume to this wetland because DNR LiDA clearly defined channel connecting 5 as flowing to Coulter Creek apprestudy area.	de the study area) that is the es that Stream 5 does not connect AR imagery does not show a g these areas. NHD maps Stream							
Documented Fish Use	None								
In-Stream Habitat	The stream channel is well defined and has some sinuosity. The channel averages five feet in width. The substrate is primarily gravel and cobble. Undercut banks and scour pools provide refugia for fish. Large woody material (LWM) is present throughout the portion of Stream 5 in the study area. There was no water present during the October 2023 site visit.								
Riparian Habitat	The riparian corridor is intact upland forest dominated by native species including western hemlock, Douglas-fir, and red alder with sword fern, salal ( <i>Gaultheria shallon</i> ), and foxglove ( <i>Digitalis purpurea</i> ) in the understory. LWM and large standing snags are present.								



#### 4.0 REGULATORY SETTING

Wetlands and streams in the study area are regulated by federal (USACE), state (Ecology and WDFW), and local (City of Bremerton) agencies. Impacts to wetlands, streams, and Critical Areas require prior authorization and coordination with regulatory agencies.

The Environmental Protection Agency (EPA) and USACE regulate wetlands and other Waters of the United States (WOTUS) under Section 404 of the Clean Water Act (CWA). The federal Endangered Species Act (ESA) requires that federal agencies not jeopardize the survival of listed species or their critical habitat. If listed species or their critical habitat occupy the study area, the proposed project would be subject to ESA requirements.

The Washington State Department of Ecology (Ecology) requires compliance with the State Water Pollution Control Act (Chapter 90.48 of the Revised Code of Washington [RCW]) and has administrative oversight of Section 401 of the CWA for state water quality certification in the case of impacts to jurisdictional WOTUS.

Any work that will use, divert, obstruct, or change the bed or flow of state waters, including streams and rivers, must do so under the terms of a Hydraulic Project Approval (HPA) issued by the WDFW. WDFW administers the HPA under Chapter 77.55 RCW and rules set forth in Chapter 173-220-110 of the Washington Administrative Code.

Wetlands in the study area are subject to BMC Sections 20.14.300 to 20.14.360, which regulate development in and around Fish and Wildlife Habitat Conservation Areas (FWHCAs).

Streams in the study area are subject to BMC Sections 20.14.700 to 20.14.760, which regulate development in and around FWHCAs.



#### 5.0 REFERENCES

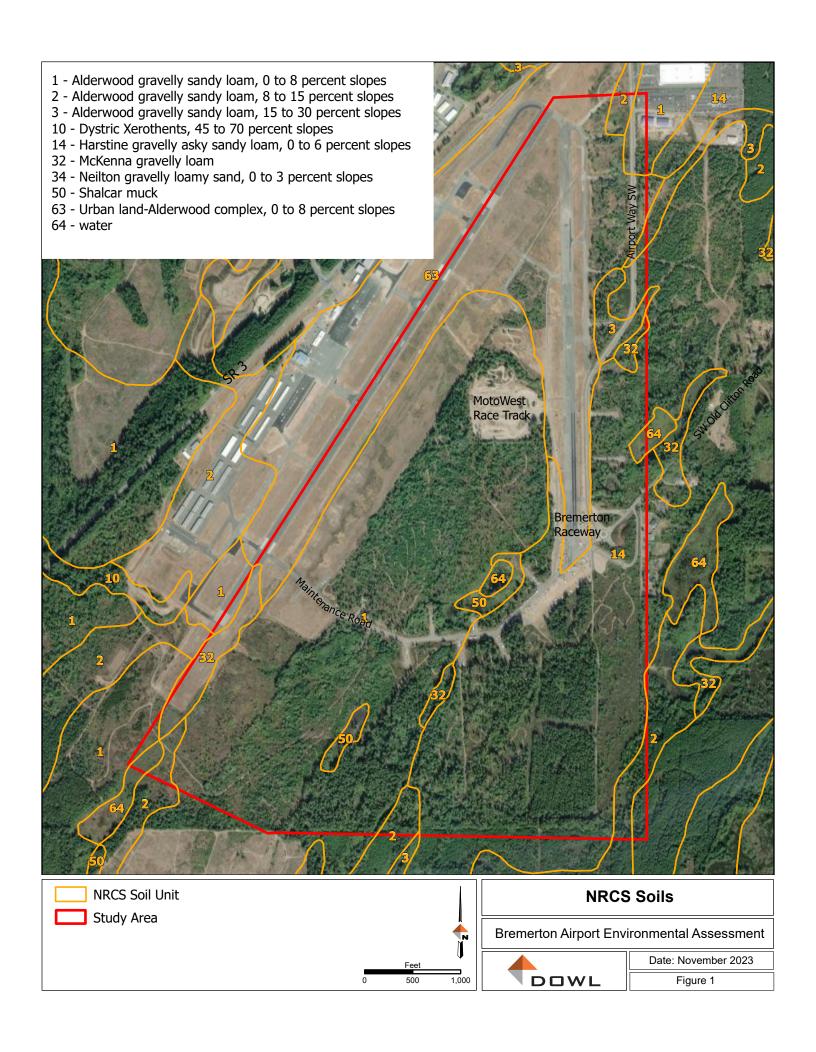
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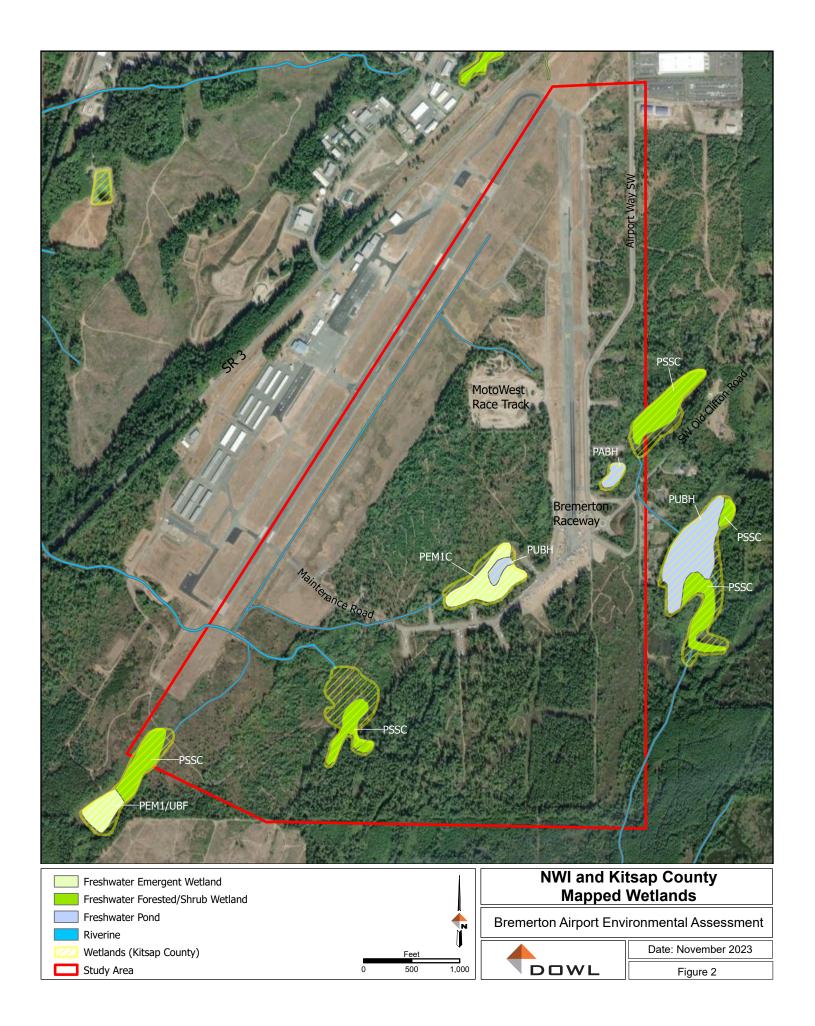


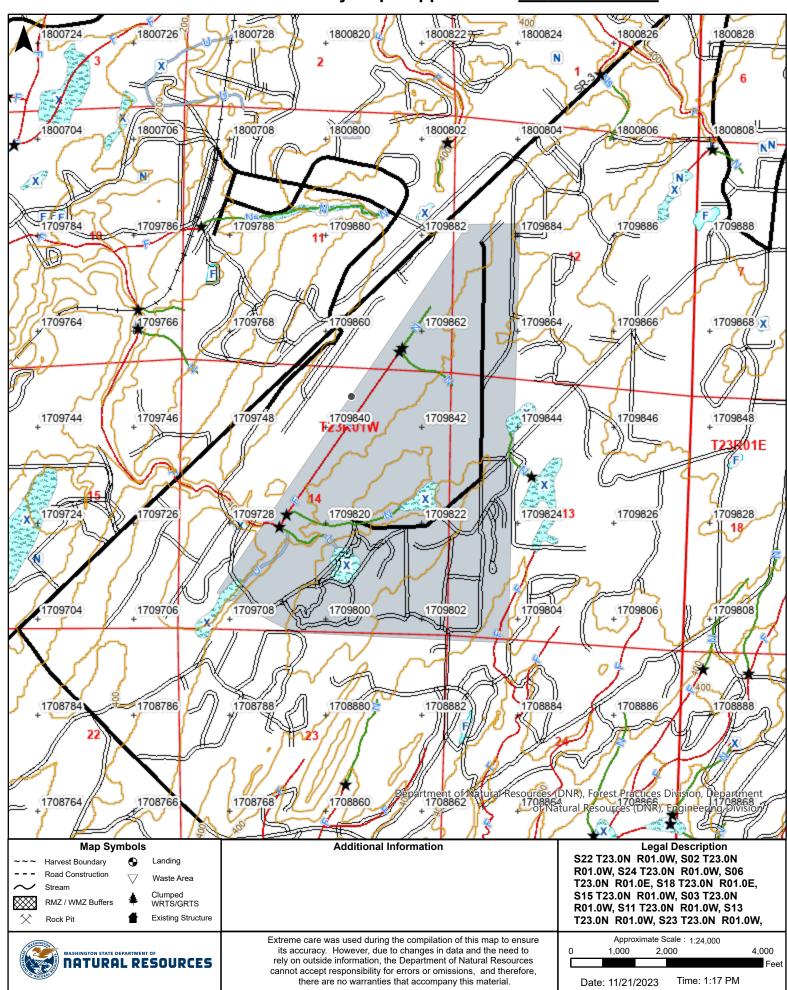
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# ATTACHMENT A: FIGURES

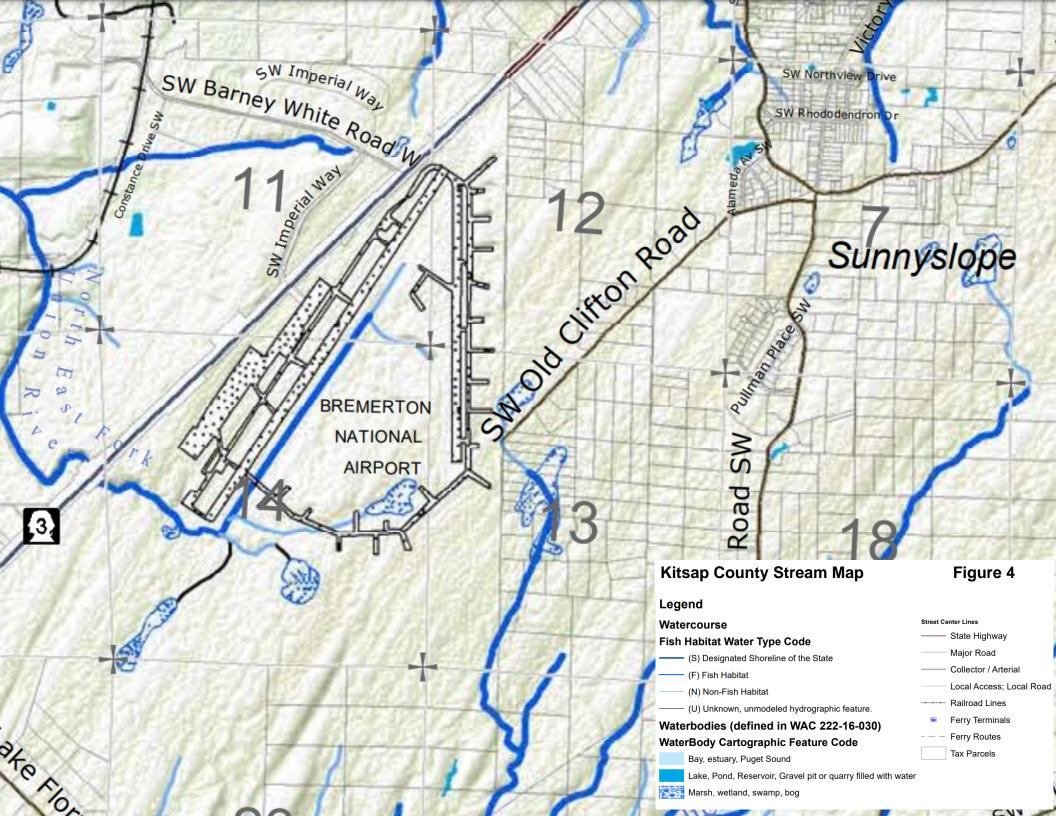




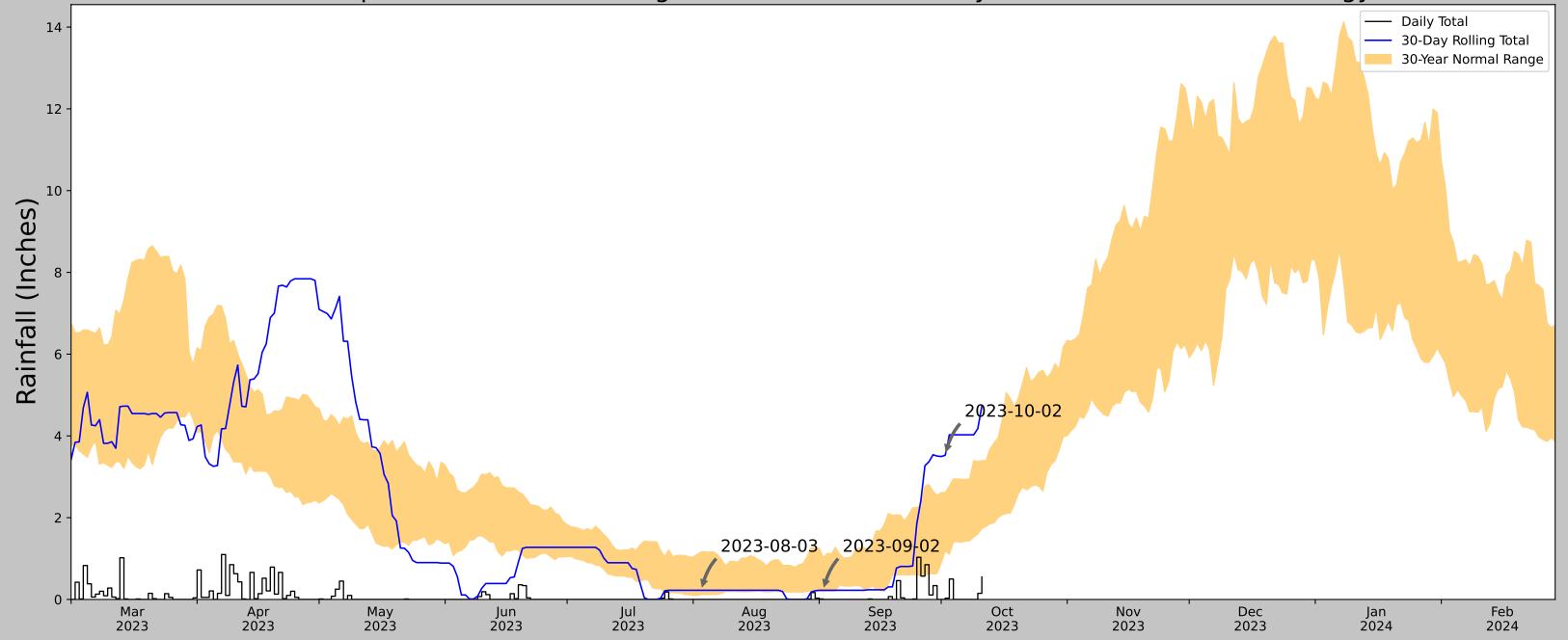


#### Legend

Water Type Breaks (FP) Map Registration Tics 40 ft. Contours Type S Type F Type N, Np, Ns U, unknown X, non-typed per WAC 222-16 Trail Railroad Railroad Grade Abandoned Orphaned Paved Road Unpaved Road/Surface Unknown **County Boundaries** Tribal Cultural Resource Contacts Other Impoundments Open Freshwater Subject to Inundation Glacier / Snowfield Wet Area Open Saltwater **Artificial Feature** Public Land Survey Townships **Public Land Survey** Sections fd6a26dec29d4600beca



# ATTACHMENT B: ANTECEDENT PRECIPITATION



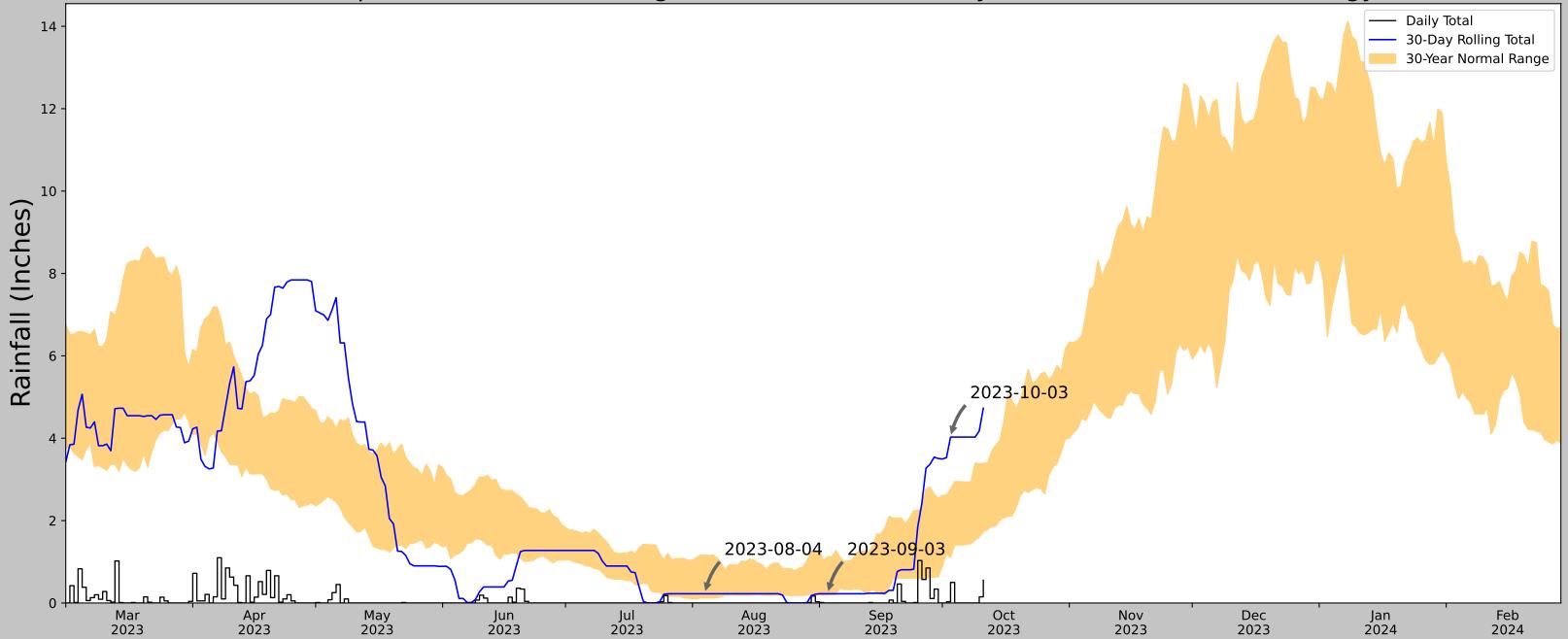
Coordinates	47.492428, -122.765060
Observation Date	2023-10-02
Elevation (ft)	437.615
Drought Index (PDSI)	Severe drought (2023-09)
WebWIMP H <sub>2</sub> O Balance	Wet Season

30 Days Ending	30 <sup>th</sup> %ile (in)	70 <sup>th</sup> %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2023-10-02	1.188976	2.614961	3.527559	Wet	3	3	9
2023-09-02	0.191732	1.025984	0.224409	Normal	2	2	4
2023-08-03	0.124016	1.162598	0.224409	Normal	2	1	2
Result							Wetter than Normal - 15



Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted A	Davs Normal T	Days Antecedent
BREMERTON	47.5689, -122.6828	109.908	6.53	327.707	5.079	10744	82
BREMERTON 2.9 NNE	47.585, -122.6694	57.087	1.276	52.821	0.642	5	0
BREMERTON 2.9 NNE	47.5852, -122.6716	19.029	1.241	90.879	0.671	21	0
BREMERTON 2.9 ENE	47.5644, -122.6444	138.123	1.817	28.215	0.869	102	8
BREMERTON 3.9 NE	47.5888, -122.6432	85.958	2.302	23.95	1.091	1	0
BREMERTON 3.9 NE	47.594, -122.6517	154.856	2.26	44.948	1.119	3	0
TRACYTON 2.3 WSW	47.6013, -122.7013	19.029	2.399	90.879	1.298	66	0
BREMERTON 1.8 NE	47.5857, -122.6092	207.021	3.622	97.113	1.982	51	0
WAUNA 3 W	47.3725, -122.7028	17.06	13.602	92.848	7.384	326	0
QUILCENE 2 SW	47.8092, -122.9136	123.031	19.771	13.123	9.156	26	0
SEATTLE BOEING FLD	47.5456, -122.3147	24.934	17.239	84.974	9.222	7	0



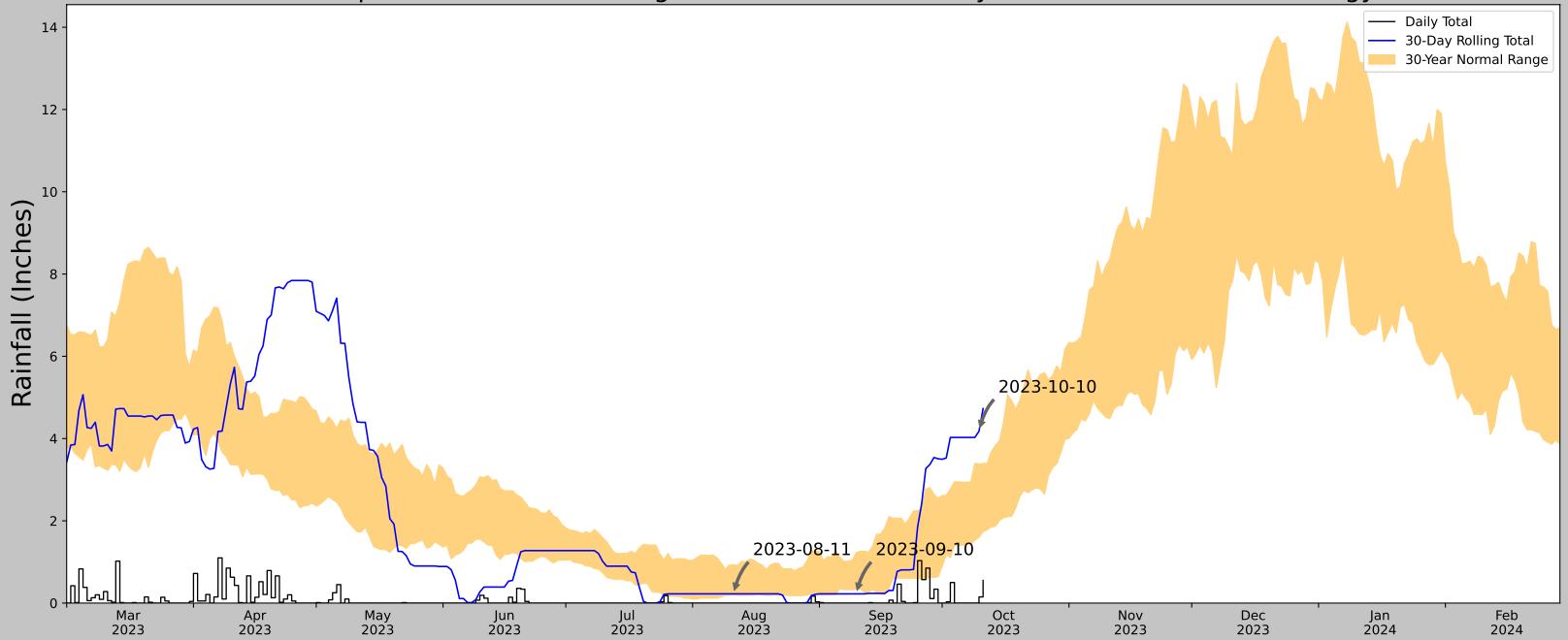
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Observation Date	2023-10-03
Elevation (ft)	437.615
Drought Index (PDSI)	Severe drought (2023-09)
WebWIMP H <sub>2</sub> O Balance	Wet Season

30 Days Ending	30 <sup>th</sup> %ile (in)	70 <sup>th</sup> %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2023-10-03	1.106299	2.766536	4.027559	Wet	3	3	9
2023-09-03	0.205512	1.127559	0.224409	Normal	2	2	4
2023-08-04	0.121654	1.162598	0.224409	Normal	2	1	2
Result							Wetter than Normal - 15



Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted △	Days Normal	Days Antecedent
BREMERTON	47.5689, -122.6828	109.908	6.53	327.707	5.079	10744	82
BREMERTON 2.9 NNE	47.585, -122.6694	57.087	1.276	52.821	0.642	5	0
BREMERTON 2.9 NNE	47.5852, -122.6716	19.029	1.241	90.879	0.671	21	0
BREMERTON 2.9 ENE	47.5644, -122.6444	138.123	1.817	28.215	0.869	102	8
BREMERTON 3.9 NE	47.5888, -122.6432	85.958	2.302	23.95	1.091	1	0
BREMERTON 3.9 NE	47.594, -122.6517	154.856	2.26	44.948	1.119	3	0
TRACYTON 2.3 WSW	47.6013, -122.7013	19.029	2.399	90.879	1.298	66	0
BREMERTON 1.8 NE	47.5857, -122.6092	207.021	3.622	97.113	1.982	51	0
WAUNA 3 W	47.3725, -122.7028	17.06	13.602	92.848	7.384	326	0
QUILCENE 2 SW	47.8092, -122.9136	123.031	19.771	13.123	9.156	26	0
SEATTLE BOEING FLD	47.5456, -122.3147	24.934	17.239	84.974	9.222	7	0



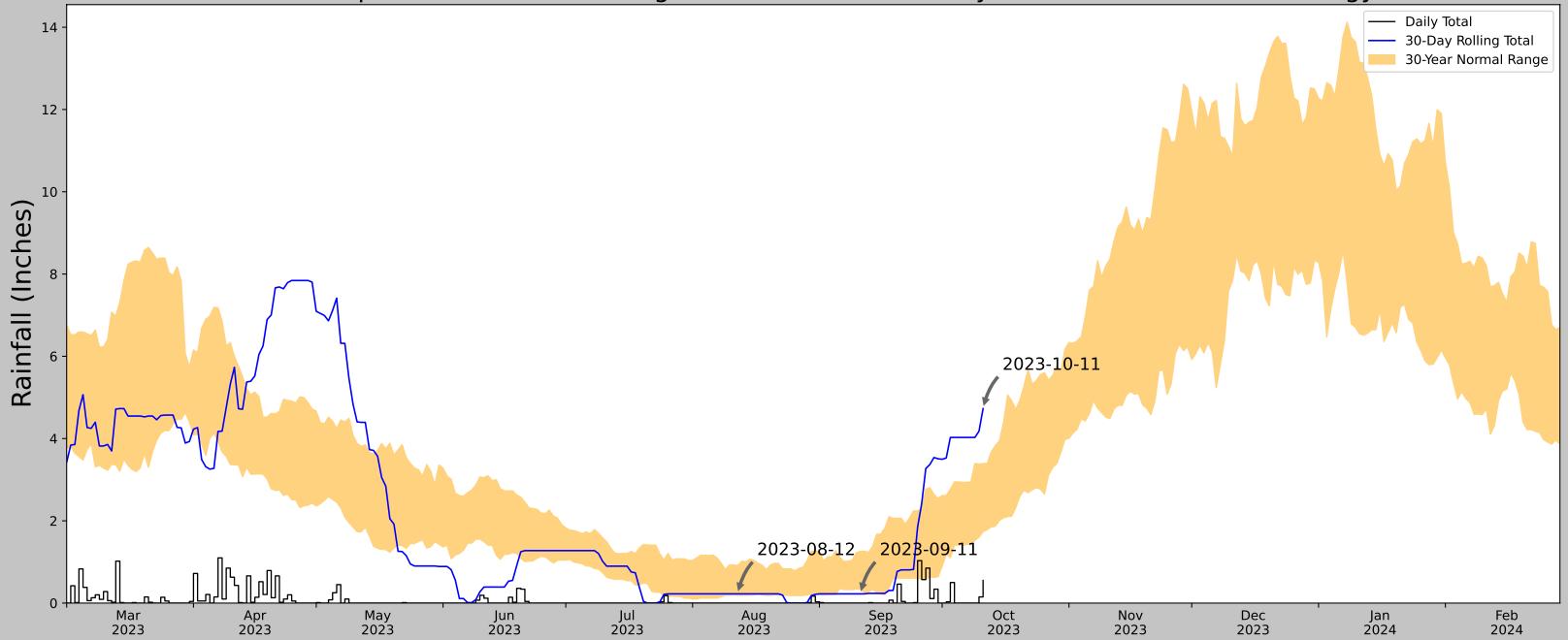
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Observation Date	2023-10-10
Elevation (ft)	437.615
Drought Index (PDSI)	Severe drought (2023-09)
WebWIMP H <sub>2</sub> O Balance	Wet Season

30 Days Ending	30 <sup>th</sup> %ile (in)	70 <sup>th</sup> %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2023-10-10	1.601969	3.377165	4.177165	Wet	3	3	9
2023-09-10	0.341732	1.221654	0.224409	Dry	1	2	2
2023-08-11	0.197244	0.929528	0.224409	Normal	2	1	2
Result							Normal Conditions - 13



Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted △	Days Normal	Days Antecedent
BREMERTON	47.5689, -122.6828	109.908	6.53	327.707	5.079	10744	82
BREMERTON 2.9 NNE	47.585, -122.6694	57.087	1.276	52.821	0.642	5	0
BREMERTON 2.9 NNE	47.5852, -122.6716	19.029	1.241	90.879	0.671	21	0
BREMERTON 2.9 ENE	47.5644, -122.6444	138.123	1.817	28.215	0.869	102	8
BREMERTON 3.9 NE	47.5888, -122.6432	85.958	2.302	23.95	1.091	1	0
BREMERTON 3.9 NE	47.594, -122.6517	154.856	2.26	44.948	1.119	3	0
TRACYTON 2.3 WSW	47.6013, -122.7013	19.029	2.399	90.879	1.298	66	0
BREMERTON 1.8 NE	47.5857, -122.6092	207.021	3.622	97.113	1.982	51	0
WAUNA 3 W	47.3725, -122.7028	17.06	13.602	92.848	7.384	326	0
QUILCENE 2 SW	47.8092, -122.9136	123.031	19.771	13.123	9.156	26	0
SEATTLE BOEING FLD	47.5456, -122.3147	24.934	17.239	84.974	9.222	7	0



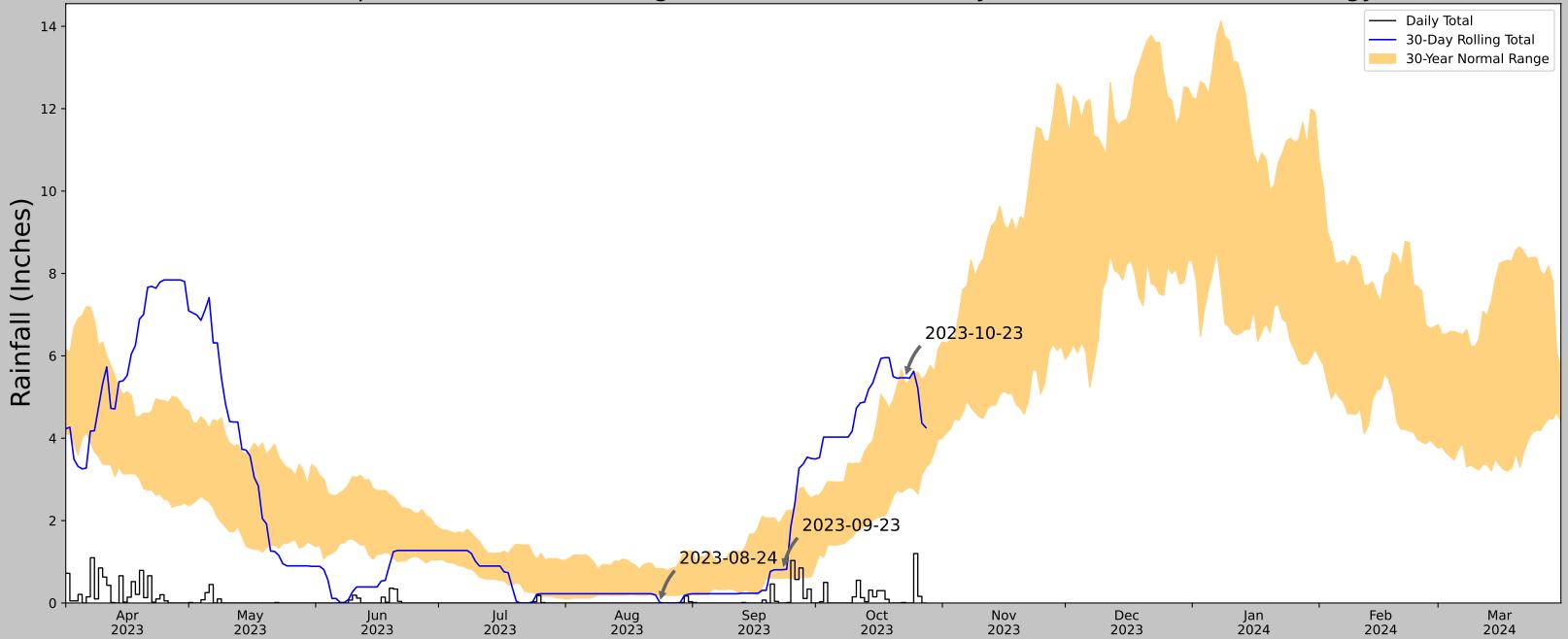
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Observation Date	2023-10-11
Elevation (ft)	437.615
Drought Index (PDSI)	Severe drought (2023-09)
WebWIMP H <sub>2</sub> O Balance	Wet Season

<u></u>							
30 Days Ending	30 <sup>th</sup> %ile (in)	70 <sup>th</sup> %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2023-10-11	1.735039	3.393701	4.728347	Wet	3	3	9
2023-09-11	0.33937	1.26063	0.224409	Dry	1	2	2
2023-08-12	0.188976	0.911811	0.224409	Normal	2	1	2
Result							Normal Conditions - 13



Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted A	Days Normal	Days Antecedent
BREMERTON	47.5689, -122.6828	109.908	6.53	327.707	5.079	10744	82
BREMERTON 2.9 NNE	47.585, -122.6694	57.087	1.276	52.821	0.642	5	0
BREMERTON 2.9 NNE	47.5852, -122.6716	19.029	1.241	90.879	0.671	21	0
BREMERTON 2.9 ENE	47.5644, -122.6444	138.123	1.817	28.215	0.869	102	8
BREMERTON 3.9 NE	47.5888, -122.6432	85.958	2.302	23.95	1.091	1	0
BREMERTON 3.9 NE	47.594, -122.6517	154.856	2.26	44.948	1.119	3	0
TRACYTON 2.3 WSW	47.6013, -122.7013	19.029	2.399	90.879	1.298	66	0
BREMERTON 1.8 NE	47.5857, -122.6092	207.021	3.622	97.113	1.982	51	0
WAUNA 3 W	47.3725, -122.7028	17.06	13.602	92.848	7.384	326	0
QUILCENE 2 SW	47.8092, -122.9136	123.031	19.771	13.123	9.156	26	0
SEATTLE BOEING FLD	47.5456, -122.3147	24.934	17.239	84.974	9.222	7	0



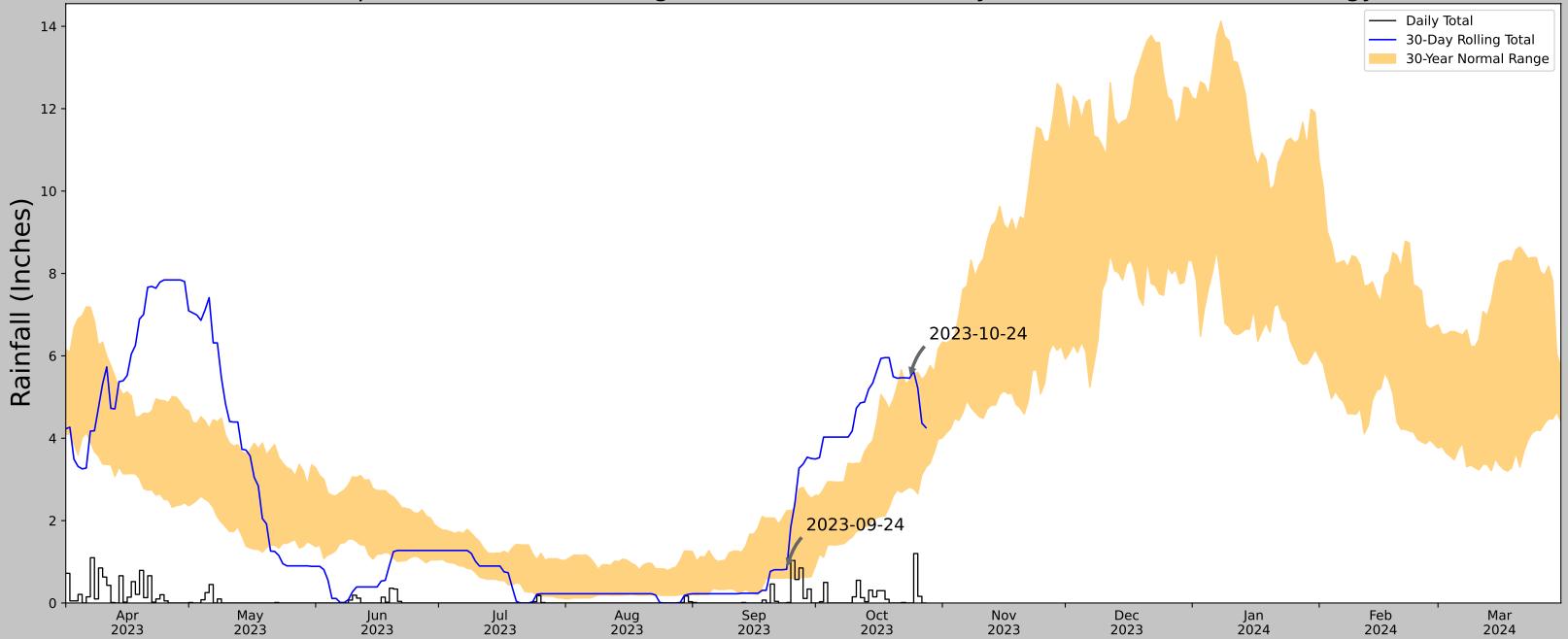
Coordinates	47.485890, -122.757133
Observation Date	2023-10-23
Elevation (ft)	489.977
Drought Index (PDSI)	Severe drought (2023-09)
WebWIMP H <sub>2</sub> O Balance	Wet Season

30 Days Ending	30 <sup>th</sup> %ile (in)	70 <sup>th</sup> %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2023-10-23	2.752756	5.325984	5.468504	Wet	3	3	9
2023-09-23	0.598819	2.064173	0.807087	Normal	2	2	4
2023-08-24	0.186614	0.831102	0.011811	Dry	1	1	1
Result							Normal Conditions - 14



Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted A	Days Normal	Days Antecedent
BREMERTON	47.5689, -122.6828	109.908	6.702	380.069	5.563	10744	82
BREMERTON 2.9 NNE	47.585, -122.6694	57.087	1.276	52.821	0.642	5	0
BREMERTON 2.9 NNE	47.5852, -122.6716	19.029	1.241	90.879	0.671	21	0
BREMERTON 2.9 ENE	47.5644, -122.6444	138.123	1.817	28.215	0.869	102	8
BREMERTON 3.9 NE	47.5888, -122.6432	85.958	2.302	23.95	1.091	1	0
BREMERTON 3.9 NE	47.594, -122.6517	154.856	2.26	44.948	1.119	3	0
TRACYTON 2.3 WSW	47.6013, -122.7013	19.029	2.399	90.879	1.298	66	0
BREMERTON 1.8 NE	47.5857, -122.6092	207.021	3.622	97.113	1.982	51	0
WAUNA 3 W	47.3725, -122.7028	17.06	13.602	92.848	7.384	326	0
QUILCENE 2 SW	47.8092, -122.9136	123.031	19.771	13.123	9.156	26	0
SEATTLE BOEING FLD	47.5456, -122.3147	24.934	17.239	84.974	9.222	7	0



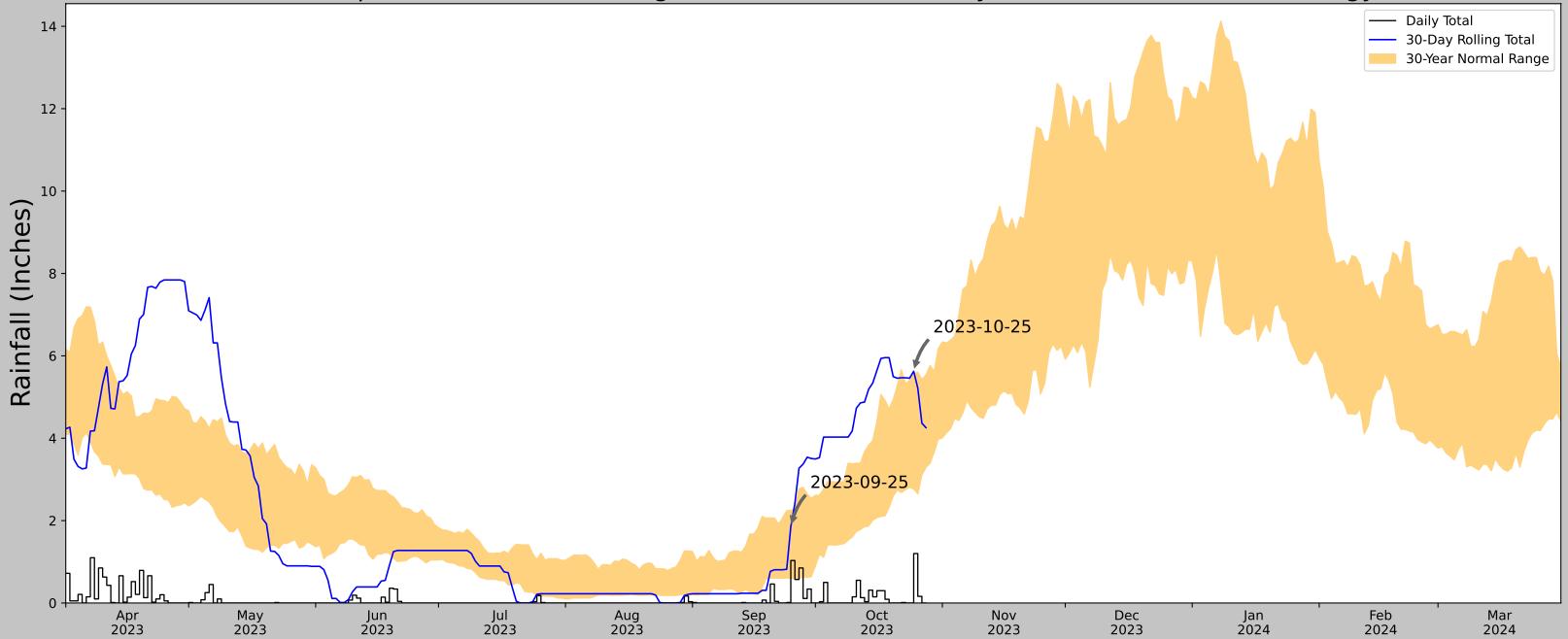
Coordinates	47.485890, -122.757133
Observation Date	2023-10-24
Elevation (ft)	489.977
Drought Index (PDSI)	Severe drought (2023-09)
WebWIMP H <sub>2</sub> O Balance	Wet Season

30 Days Ending	30 <sup>th</sup> %ile (in)	70 <sup>th</sup> %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2023-10-24	2.807087	5.407087	5.456693	Wet	3	3	9
2023-09-24	0.609055	2.24252	0.818898	Normal	2	2	4
2023-08-25	0.181102	0.831102	0.0	Dry	1	1	1
Result							Normal Conditions - 14



Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation ∆	Weighted A	Days Normal	Days Antecedent
BREMERTON	47.5689, -122.6828	109.908	6.702	380.069	5.563	10744	82
BREMERTON 2.9 NNE	47.585, -122.6694	57.087	1.276	52.821	0.642	5	0
BREMERTON 2.9 NNE	47.5852, -122.6716	19.029	1.241	90.879	0.671	21	0
BREMERTON 2.9 ENE	47.5644, -122.6444	138.123	1.817	28.215	0.869	102	8
BREMERTON 3.9 NE	47.5888, -122.6432	85.958	2.302	23.95	1.091	1	0
BREMERTON 3.9 NE	47.594, -122.6517	154.856	2.26	44.948	1.119	3	0
TRACYTON 2.3 WSW	47.6013, -122.7013	19.029	2.399	90.879	1.298	66	0
BREMERTON 1.8 NE	47.5857, -122.6092	207.021	3.622	97.113	1.982	51	0
WAUNA 3 W	47.3725, -122.7028	17.06	13.602	92.848	7.384	326	0
QUILCENE 2 SW	47.8092, -122.9136	123.031	19.771	13.123	9.156	26	0
SEATTLE BOEING FLD	47.5456, -122.3147	24.934	17.239	84.974	9.222	7	0



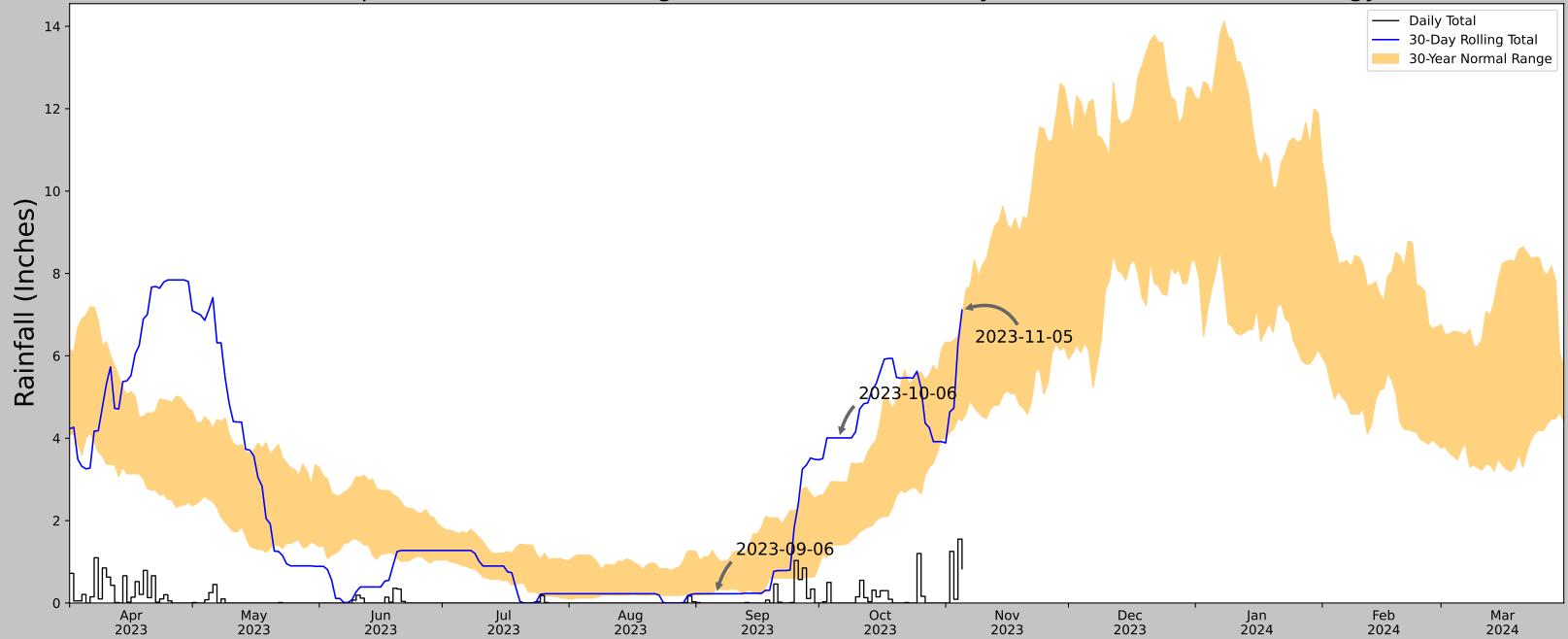
Coordinates	47.485890, -122.757133
Observation Date	2023-10-25
Elevation (ft)	489.977
Drought Index (PDSI)	Severe drought (2023-09)
WebWIMP H <sub>2</sub> O Balance	Wet Season

30 Days Ending	30 <sup>th</sup> %ile (in)	70 <sup>th</sup> %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2023-10-25	2.770866	5.554725	5.625984	Wet	3	3	9
2023-09-25	0.595669	2.246063	1.850394	Normal	2	2	4
2023-08-26	0.186614	0.785827	0.0	Dry	1	1	1
Result							Normal Conditions - 14



Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation A	Weighted A	Days Normal	Days Antecedent
BREMERTON	47.5689, -122.6828	109.908	6.702	380.069	5.563	10744	82
BREMERTON 2.9 NNE	47.585, -122.6694	57.087	1.276	52.821	0.642	5	0
BREMERTON 2.9 NNE	47.5852, -122.6716	19.029	1.241	90.879	0.671	21	0
BREMERTON 2.9 ENE	47.5644, -122.6444	138.123	1.817	28.215	0.869	102	8
BREMERTON 3.9 NE	47.5888, -122.6432	85.958	2.302	23.95	1.091	1	0
BREMERTON 3.9 NE	47.594, -122.6517	154.856	2.26	44.948	1.119	3	0
TRACYTON 2.3 WSW	47.6013, -122.7013	19.029	2.399	90.879	1.298	66	0
BREMERTON 1.8 NE	47.5857, -122.6092	207.021	3.622	97.113	1.982	51	0
WAUNA 3 W	47.3725, -122.7028	17.06	13.602	92.848	7.384	326	0
QUILCENE 2 SW	47.8092, -122.9136	123.031	19.771	13.123	9.156	26	0
SEATTLE BOEING FLD	47.5456, -122.3147	24.934	17.239	84.974	9.222	7	0



Coordinates	47.482521, -122.767980
Observation Date	2023-11-05
Elevation (ft)	462.471
Drought Index (PDSI)	Not available (2023-10)
WebWIMP H <sub>2</sub> O Balance	Wet Season

30 Days Ending	30 <sup>th</sup> %ile (in)	70 <sup>th</sup> %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2023-11-05	4.42874	6.977559	7.110236	Wet	3	3	9
2023-10-06	1.405906	2.937402	4.007874	Wet	3	2	6
2023-09-06	0.357874	1.108661	0.224409	Dry	1	1	1
Result							Wetter than Normal - 16



Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted ∆ [	Days Normal	Days Antecedent
BREMERTON	47.5689, -122.6828	109.908	7.17	352.563	5.755	10745	82
BREMERTON 2.9 NNE	47.585, -122.6694	57.087	1.276	52.821	0.642	5	0
BREMERTON 2.9 NNE	47.5852, -122.6716	19.029	1.241	90.879	0.671	21	0
BREMERTON 2.9 ENE	47.5644, -122.6444	138.123	1.817	28.215	0.869	101	7
BREMERTON 3.9 NE	47.5888, -122.6432	85.958	2.302	23.95	1.091	1	0
BREMERTON 3.9 NE	47.594, -122.6517	154.856	2.26	44.948	1.119	3	0
TRACYTON 2.3 WSW	47.6013, -122.7013	19.029	2.399	90.879	1.298	66	0
BREMERTON 1.8 NE	47.5857, -122.6092	207.021	3.622	97.113	1.982	51	1
WAUNA 3 W	47.3725, -122.7028	17.06	13.602	92.848	7.384	326	0
QUILCENE 2 SW	47.8092, -122.9136	123.031	19.771	13.123	9.156	26	0
SEATTLE BOEING FLD	47.5456, -122.3147	24.934	17.239	84.974	9.222	7	0

# ATTACHMENT C: WETLAND DETERMINATION DATA SHEETS

#### WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

Project/Site: Bremerton Airport		City/Cou	nty: City of	Bremerton	Sampling Date:	10/3/23
Applicant/Owner: Port of Bremerton				State: WA	Sampling Point:	W1-SP1
Investigator(s): M. Brownell, M. Evinger		Section, T	ownship, Ra	ange: SEC 13, T23N, R	1W	
Landform (hillside, terrace, etc.): depression		 Local relief (co	oncave, con	vex, none): concave	Slop	e (%): 0-1
Subregion (LRR): LRR A Lat: 47.	.489541		Long: -	122.751322	 Datum:	NAD83, NAVD88
Soil Map Unit Name: Harstine gravelly ashy sandy	loam, 0 to 6 per	cent slopes		NWI classi	fication: PSSC	
Are climatic / hydrologic conditions on the site typic	al for this time o	f year?	Yes	No X (If no, exp	olain in Remarks.)	
Are Vegetation , Soil , or Hydrology		-	<u> </u>			)
Are Vegetation , Soil , or Hydrology	_			rplain any answers in Re	<del></del>	
SUMMARY OF FINDINGS – Attach site					·	ures, etc.
Hydrophytic Vegetation Present? Yes X	No	ls the	Sampled A	Area		
Hydric Soil Present? Yes X	No		n a Wetland		No	
Wetland Hydrology Present? Yes X	No				<u>——</u>	
Remarks:		<u>'</u>				
Climatic conditions wetter than normal (USACE Ar	ntecedent Precip	oitation Tool).				
l VEGETATION – Use scientific names o	of plants.					
	Absolute	Dominant	Indicator	1		
<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )	% Cover	Species?	Status	Dominance Test wor	rksheet:	
1.				Number of Dominant	•	0 (4)
2.				Are OBL, FACW, or F		2 (A)
3. 4.				Total Number of Dom Across All Strata:	inant Species	2 (B)
		=Total Cover		Percent of Dominant	——————————————————————————————————————	(B)
Sapling/Shrub Stratum (Plot size: 15 ft	)			Are OBL, FACW, or F	•	0.0% (A/B
1. Spiraea douglasii	90	Yes	FACW			
2. Salix lasiandra	5	No	FACW	Prevalence Index wo	orksheet:	
3				Total % Cover of		
4				OBL species	x 1 =	
5		-Tatal Cause		FACW species		
Herb Stratum (Plot size: 5 ft )	95	=Total Cover		FAC species FACU species	x 3 = x 4 =	
1. Phalaris arundinacea	50	Yes	FACW	UPL species	x 5 =	
2.				Column Totals:	(A)	(B)
3.				Prevalence Index	= B/A =	``
4.						
5				Hydrophytic Vegetat		
6.				l —	Hydrophytic Vegeta	ation
7				X 2 - Dominance Te		
8. 9.				3 - Prevalence Ind	dex is <u>\$3.0</u> Adaptations <sup>1</sup> (Provid	lo supporting
10				· · ·	s or on a separate s	
11.				5 - Wetland Non-		,
	50	=Total Cover		l —	ophytic Vegetation <sup>1</sup>	(Explain)
Woody Vine Stratum (Plot size: 15 ft	)			<sup>1</sup> Indicators of hydric s		` ' '
1				be present, unless dis		
2				Hydrophytic		
% Bare Ground in Herb Stratum0		=Total Cover		Vegetation Present? Yes	X No	_
Remarks: Pinus contorta within 30 feet but rooted outside we	etland			1		

SOIL Sampling Point: W1-SP1

0-9 Color (mois 0-9 10YR 2/1			x Featur					
0.0 10VP 2/1	<u>st) % </u>	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Tex	ture	Remarks
<u> </u>	100					Mu	ıck	
9-10 2.5YR 3/2	2 100					Mu	ıck	
10-16 10YR 3/6	98	5YR 4/6	2	С	PL	MuckkyLo	sáltnl/Qatang	mucky silt loam
								·
		-1						
Type: C=Concentration, D=					oated S	and Grains		ion: PL=Pore Lining, M=Matrix.
ydric Soil Indicators: (Ap	phicable to all L			•				for Problematic Hydric Soils <sup>3</sup>
Histosol (A1)		Sandy Gle	-					Muck (A10) (LRR A, E)
Histic Epipedon (A2)		Sandy Red						langanese Masses (F12) (LRR I
Black Histic (A3)		Stripped M		•	<b>/</b>	MI DA 4		arent Material (F21)
Hydrogen Sulfide (A4)	\ C\	Loamy Mu	•	, ,	(except	. IVILKA 1)		Shallow Dark Surface (F22)
1 cm Muck (A9) (LRR D	•	Loamy Gle	•	` '			Otner	(Explain in Remarks)
Depleted Below Dark Start Thick Dark Surface (A12)		Depleted N		-			3Indiante	of hydrophytic yearstation and
Thick Dark Surface (A12 Sandy Mucky Mineral (S	,	Redox Dar Depleted D			<b>\</b>			of hydrophytic vegetation and dhydrology must be present,
2.5 cm Mucky Peat or P	•				)			d flydrology must be present, sidisturbed or problematic.
		Tredox Dep	JI 6331011	3 (1 0)			unics:	disturbed of problematic.
Restrictive Layer (if obser	vea):							
Type: Depth (inches):						Hydric S	oil Present?	Yes X No
Lemarks:		<u> </u>				Tiyunc 3	On Fresent:	Tes No
YDROLOGY								
	tors:							
Vetland Hydrology Indica		red; check all that a	apply)				Secondary	/ Indicators (2 or more required)
YDROLOGY  Vetland Hydrology Indicators (minimum Surface Water (A1)		red; check all that a		ves (B9)	(ехсер	t	-	r Indicators (2 or more required) -Stained Leaves (B9) (MLRA 1,
Vetland Hydrology Indicators (minimum		Water-Stai	ned Lea	ves (B9)		t	Water	
Vetland Hydrology Indicat rimary Indicators (minimun Surface Water (A1)		Water-Stai	ned Lea <b>1, 2, 4A</b> ,	, ,		t	Water	-Stained Leaves (B9) (MLRA 1,
Vetland Hydrology Indicators (minimum Surface Water (A1) High Water Table (A2)		Water-Stai	ned Lea <b>1, 2, 4A</b> , (B11)	and 4B	)	t	Water  4A  Draina  Dry-Se	-Stained Leaves (B9) (MLRA 1, , and 4B) age Patterns (B10) eason Water Table (C2)
Vetland Hydrology Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3)	n of one is requir	Water-Stai MLRA Salt Crust	ned Lea <b>1, 2, 4A</b> , (B11) vertebra	and 4B;	)	t	Water  4A  Draina  Dry-Se	-Stained Leaves (B9) (MLRA 1, , and 4B) age Patterns (B10)
Vetland Hydrology Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	n of one is requir	Water-Stai MLRA Salt Crust Aquatic Inv	ned Lea <b>1, 2, 4A</b> , (B11) vertebrat Sulfide (	and 4B tes (B13) Odor (C1	· · ·		Water  4A  Draina  Dry-Se  Satura	-Stained Leaves (B9) (MLRA 1, , and 4B) age Patterns (B10) eason Water Table (C2)
Vetland Hydrology Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	n of one is requir	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  X Oxidized F  Presence	ned Lea 1, 2, 4A, (B11) vertebrate Sulfide ( Rhizosphof Reduce	tes (B13) Odor (C1 eres on lead Iron (	(C4)	coots (C3)	Water  4A  Draina  Dry-Se  Satura  X Geom  Shallo	-Stained Leaves (B9) (MLRA 1, , and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (Corphic Position (D2) w Aquitard (D3)
Vetland Hydrology Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	n of one is requir	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  X Oxidized F  Presence of Recent Iro	ned Lea  1, 2, 4A, (B11) vertebrat Sulfide ( Rhizosph of Reduc	tes (B13) Odor (C1 eres on loced Iron (	) ) Living R (C4) lled Soi	coots (C3)	Water  4A Draina Dry-Se Satura X Geom Shallo X FAC-N	-Stained Leaves (B9) (MLRA 1, , and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (Corphic Position (D2) w Aquitard (D3) Neutral Test (D5)
Vetland Hydrology Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6	n of one is requir	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  X Oxidized F  Presence of  Recent Iro  Stunted or	ned Lea 1, 2, 4A, (B11) vertebrat Sulfide ( Rhizosph of Reduc n Reduc Stresse	tes (B13) Odor (C1 teres on loced Iron (ction in Ti	Living R (C4) lled Soi	coots (C3)	Water  4A Draina Dry-Se Satura X Geom Shallo X FAC-N Raisee	-Stained Leaves (B9) (MLRA 1, , and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (Coorphic Position (D2) w Aquitard (D3) Jeutral Test (D5) d Ant Mounds (D6) (LRR A)
Vetland Hydrology Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on A6	n of one is requir	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  X Oxidized F  Presence of Recent Iro  Stunted or  Other (Exp	ned Lea 1, 2, 4A, (B11) vertebrat Sulfide ( Rhizosph of Reduc n Reduc Stresse	tes (B13) Odor (C1 teres on loced Iron (ction in Ti	Living R (C4) lled Soi	coots (C3)	Water  4A Draina Dry-Se Satura X Geom Shallo X FAC-N Raisee	-Stained Leaves (B9) (MLRA 1, , and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (Corphic Position (D2) w Aquitard (D3) Neutral Test (D5)
Vetland Hydrology Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6	n of one is requir	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  X Oxidized F  Presence of Recent Iro  Stunted or  Other (Exp	ned Lea 1, 2, 4A, (B11) vertebrat Sulfide ( Rhizosph of Reduc n Reduc Stresse	tes (B13) Odor (C1 teres on loced Iron (ction in Ti	Living R (C4) lled Soi	coots (C3)	Water  4A Draina Dry-Se Satura X Geom Shallo X FAC-N Raisee	-Stained Leaves (B9) (MLRA 1, , and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (Coorphic Position (D2) w Aquitard (D3) Jeutral Test (D5) d Ant Mounds (D6) (LRR A)
Vetland Hydrology Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae Sparsely Vegetated Cor	n of one is requir 5) erial Imagery (B7 ncave Surface (B	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  X Oxidized F  Presence of Recent Iro  Stunted or  Other (Exp	ned Lea 1, 2, 4A, (B11) vertebrat Sulfide ( Rhizosph of Reduc n Reduc Stresse blain in R	and 4B tes (B13) Ddor (C1 teres on led Iron (ced Iron in Tidd Plants Remarks)	(C4) Illed Soi (D1) (LI	coots (C3)	Water  4A Draina Dry-Se Satura X Geom Shallo X FAC-N Raisee	-Stained Leaves (B9) (MLRA 1, , and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (Coorphic Position (D2) w Aquitard (D3) Jeutral Test (D5) d Ant Mounds (D6) (LRR A)
Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6 Inundation Visible on A6 Sparsely Vegetated Cor Gield Observations:	n of one is requires) erial Imagery (B7 ncave Surface (E	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  X Oxidized F  Presence of Recent Iro  Stunted or  Other (Exp  38)	ned Lea 1, 2, 4A, (B11) vertebrat Sulfide ( Rhizosph of Reduc n Reduc Stresse blain in R	and 4B tes (B13) Ddor (C1 teres on led Iron ( tettion in Ti d Plants Remarks)	Living R (C4) lled Soi (D1) (Li	coots (C3)	Water  4A Draina Dry-Se Satura X Geom Shallo X FAC-N Raisee	-Stained Leaves (B9) (MLRA 1, , and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (Coorphic Position (D2) w Aquitard (D3) Jeutral Test (D5) d Ant Mounds (D6) (LRR A)
Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6 Inundation Visible on Ae Sparsely Vegetated Cor Field Observations: Surface Water Present?	of one is required on of one is required on of one is required on one is required on one of the other of the other one of the	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  X Oxidized F  Presence of Recent Iro  Stunted or  Other (Exp  38)	ned Lea 1, 2, 4A, (B11) vertebrat Sulfide ( Rhizosph of Reduc n Reduc Stresse olain in R	and 4B tes (B13) Ddor (C1 teres on led Iron (tition in Tition in T	Living R (C4) lled Soi (D1) (Li	loots (C3) ls (C6) RR A)	Water  4A  Draina  Dry-Se  Satura  X Geom  Shallo  X FAC-N  Raisee  Frost-	-Stained Leaves (B9) (MLRA 1, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (Corphic Position (D2) w Aquitard (D3) leutral Test (D5) d Ant Mounds (D6) (LRR A) Heave Hummocks (D7)
Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae Sparsely Vegetated Cor Field Observations: Surface Water Present? Vater Table Present?	n of one is requires) erial Imagery (B7 ncave Surface (E	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  X Oxidized F  Presence of Recent Iro  Stunted or  Other (Exp  38)  No X  No X	ned Lea 1, 2, 4A, (B11) vertebrat Sulfide ( Rhizosph of Reduc n Reduc Stresse blain in R	and 4B tes (B13) Ddor (C1 teres on led Iron (tition in Tition in T	Living R (C4) lled Soi (D1) (Li	loots (C3) ls (C6) RR A)	Water  4A  Draina  Dry-Se  Satura  X Geom  Shallo  X FAC-N  Raisee  Frost-	-Stained Leaves (B9) (MLRA 1, , and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (Coorphic Position (D2) w Aquitard (D3) Jeutral Test (D5) d Ant Mounds (D6) (LRR A)
Vetland Hydrology Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6 Inundation Visible on Active Sparsely Vegetated Corticated Corti	of one is required of one is required in a second of one is re	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  X Oxidized F  Presence of Recent Iro  Stunted or  Other (Exp  No X  No X  No X  No X	ned Lea 1, 2, 4A, (B11) vertebrat Sulfide ( Rhizosph of Reduc n Reduc Stresse olain in F	and 4B  tes (B13)  Odor (C1 eres on led Iron (ction in Tidd Plants Remarks)  nches): _ nches): _ nches): _	Living R (C4) Iled Soi (D1) (Li	oots (C3) Is (C6) RR A) Wetlan	Water  4A Draina Dry-Se Satura X Geom Shallo X FAC-N Raisee Frost-l	-Stained Leaves (B9) (MLRA 1, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (Corphic Position (D2) w Aquitard (D3) leutral Test (D5) d Ant Mounds (D6) (LRR A) Heave Hummocks (D7)
Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae Sparsely Vegetated Cor Field Observations: Surface Water Present? Vater Table Present?	of one is required of one is required in a second of one is re	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  X Oxidized F  Presence of Recent Iro  Stunted or  Other (Exp  No X  No X  No X  No X	ned Lea 1, 2, 4A, (B11) vertebrat Sulfide ( Rhizosph of Reduc n Reduc Stresse olain in F	and 4B  tes (B13)  Odor (C1 eres on led Iron (ction in Tidd Plants Remarks)  nches): _ nches): _ nches): _	Living R (C4) Iled Soi (D1) (Li	oots (C3) Is (C6) RR A) Wetlan	Water  4A Draina Dry-Se Satura X Geom Shallo X FAC-N Raisee Frost-l	-Stained Leaves (B9) (MLRA 1, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (Corphic Position (D2) w Aquitard (D3) leutral Test (D5) d Ant Mounds (D6) (LRR A) Heave Hummocks (D7)
Vetland Hydrology Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6 Inundation Visible on Active Sparsely Vegetated Corticated Corti	of one is required of one is required in a second of one is re	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  X Oxidized F  Presence of Recent Iro  Stunted or  Other (Exp  No X  No X  No X  No X	ned Lea 1, 2, 4A, (B11) vertebrat Sulfide ( Rhizosph of Reduc n Reduc Stresse olain in F	and 4B  tes (B13)  Odor (C1 eres on led Iron (ction in Tidd Plants Remarks)  nches): _ nches): _ nches): _	Living R (C4) Iled Soi (D1) (Li	oots (C3) Is (C6) RR A) Wetlan	Water  4A Draina Dry-Se Satura X Geom Shallo X FAC-N Raisee Frost-l	-Stained Leaves (B9) (MLRA 1, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (Corphic Position (D2) w Aquitard (D3) leutral Test (D5) d Ant Mounds (D6) (LRR A) Heave Hummocks (D7)

# WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

Project/Site: Bremerton Airport		City/Cour	nty: City of B	remerton		Sampling Da	ite: 10/3/	/23
Applicant/Owner: Port of Bremerton				State:	WA	Sampling Po	int: W1	-SP2
Investigator(s): M. Brownell, M. Evinger		Section, T	ownship, Rar	nge: SEC	13, T23N, R	1W		
Landform (hillside, terrace, etc.): terrace		 Local relief (co	oncave, conve	ex, none):	convex		Slope (%):	: 2
Subregion (LRR): LRR A Lat: 47.489	558		Long: -1	22.751202		Datu	ım: <sub>NAD83,</sub>	, NAVD88
Soil Map Unit Name: Water						ication: PSSC		
Are climatic / hydrologic conditions on the site typical fo	r this time o	f vear?	Yes	No X	-	olain in Remark		
Are Vegetation, Soil, or Hydrologys					-			
Are Vegetation, Soil, or Hydrologyr			If needed, exp					_
SUMMARY OF FINDINGS – Attach site ma			·	•		,	eatures,	, etc.
Hydrophytic Vegetation Present? Yes No	X	Is the	Sampled A	rea				
	X	l	n a Wetland?		Yes	No X		
	X							
Remarks:								
Hydrologic conditions wetter than normal (USACE Ant	ecedent Pre	ecipitation Tool	I).					
VEGETATION – Use scientific names of pl	lants.							
	Absolute	Dominant	Indicator					
Tree Stratum (Plot size: 30 ft )	% Cover	Species?	Status	Dominan	ice Test wor	ksheet:		
1. Pinus contorta	10	Yes	FAC			Species That	2	<b>(\</b> \
2. 3.					FACW, or F	-		_ <sup>(A)</sup>
4.				Across Al		inant Species	4	(B)
	10	=Total Cover				- Species That		_` ′
Sapling/Shrub Stratum (Plot size: 15 ft )					FACW, or F.	•	50.0%	_ (A/B
1. Gaultheria shallon	40	Yes	FACU					
2. Spiraea douglasii	40	Yes	FACW		ce Index wo			
3. Vaccinium ovatum	30	Yes	FACU		I % Cover of		Itiply by:	_
4. <u>Tsuga heterophylla</u>	3	<u>No</u>	FACU_	OBL spec			0	_
5	113	=Total Cover		FACW spec		-	80 30	-
Herb Stratum (Plot size: 5 ft )	113	- Total Cover		FACU spec		<del></del>	292	-
1.				UPL spec				_
2.				Column T	otals: 12	23 (A)	402	_ _ (B)
3.				Preval	ence Index	= B/A =	3.27	_
4								
5				_	_	ion Indicators		
6.						Hydrophytic Ve	getation	
7					ominance Te revalence Ind			
8. 9.						Adaptations¹(P	rovide sun	norting
9						s or on a separ		
11						√ascular Plants	•	
		=Total Cover		Probl	ematic Hydro	ophytic Vegetat	ion¹ (Expla	ain)
Woody Vine Stratum (Plot size: 15 ft )				<sup>1</sup> Indicator	s of hydric so	oil and wetland	hydrology	must
1				be preser	nt, unless dis	turbed or proble	ematic.	
2				Hydroph				
% Bare Ground in Herb Stratum		=Total Cover		Vegetation Present?		No _	X	
Remarks:								

SOIL Sampling Point: W1-SP2 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Color (moist) % % Loc<sup>2</sup> (inches) Color (moist) Type<sup>1</sup> Texture Remarks Silatn loga mayey 2.5Y 4/3 silt loam 0-10 100 Silarly mayey 10-12 100 10YR 4/6 silt loam 12-16 10YR 4/4 100 Sidan logeconayey silt loam

¹Type: C=Concentration, D=Depletion, RM=Red	uced Matrix, CS=Covered or Coated S	and Grains.	<sup>2</sup> Location: Pl	_=Pore Lining, N	Л=Matrix.	
Hydric Soil Indicators: (Applicable to all LRRs			Indicators for Pr			
Histosol (A1)	Sandy Gleyed Matrix (S4)		2 cm Muck (A	(10) <b>(LRR A, E)</b>		
Histic Epipedon (A2)	Sandy Redox (S5)		Iron-Mangane	ese Masses (F1	2) <b>(LRR I</b>	D)
Black Histic (A3)	Stripped Matrix (S6)		Red Parent M	laterial (F21)		
Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1) (except	MLRA 1)	Very Shallow	Dark Surface (I	F22)	
1 cm Muck (A9) (LRR D, G)	Loamy Gleyed Matrix (F2)		Other (Explai	n in Remarks)		
Depleted Below Dark Surface (A11)	Depleted Matrix (F3)					
Thick Dark Surface (A12)	Redox Dark Surface (F6)		<sup>3</sup> Indicators of hyd	rophytic vegetat	tion and	
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)		wetland hydro	ology must be p	resent,	
2.5 cm Mucky Peat or Peat (S2) (LRR G)	Redox Depressions (F8)		unless disturb	oed or problema	itic.	
Restrictive Layer (if observed):						
Type:						
Depth (inches):		Hydric So	oil Present?	Yes	No	X
Remarks:						

Wetland Hydrology Indicators:					
Primary Indicators (minimum of one is require	ed; check all that apply)	Secondary Indicators (2 or more required)			
Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2			
High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)			
Saturation (A3)	Salt Crust (B11)	Drainage Patterns (B10)			
Water Marks (B1)	Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)			
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)			
Drift Deposits (B3)	Oxidized Rhizospheres on Living Roots	Geomorphic Position (D2)			
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Shallow Aquitard (D3)			
Iron Deposits (B5)	FAC-Neutral Test (D5)				
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (LRR A	Raised Ant Mounds (D6) (LRR A)			
Inundation Visible on Aerial Imagery (B7	Other (Explain in Remarks)	Frost-Heave Hummocks (D7)			
Sparsely Vegetated Concave Surface (B	3)				
Field Observations:					
Surface Water Present? Yes	No X Depth (inches):				
Water Table Present? Yes	No X Depth (inches):				
Saturation Present? Yes	No X Depth (inches):	Wetland Hydrology Present? Yes No X			
(includes capillary fringe)					
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos, previous inspections	s), if available:			
Remarks:					

# WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

Project/Site: Bremerton Airport		City/Cour	nty: City of	Bremerton	Sampling Date:	10/3/23
Applicant/Owner: Port of Bremerton				State: WA	Sampling Point:	W2-SP1
Investigator(s): M. Brownell, M. Evinger		Section, T	ownship, Ra	ange: SEC 13, T23N, F	R1W	
Landform (hillside, terrace, etc.): pond edge	1	 ∟ocal relief (co	ncave, con	/ex, none): concave	Slop	pe (%): _0-1
Subregion (LRR): LRR A Lat: 47.48	37292		Long: -	122.753282	Datum:	NAD83, NAVD88
Soil Map Unit Name: Harstine gravelly ashy sandy lo	am, 0 to 6 per	cent slopes		NWI class	ification: none	
Are climatic / hydrologic conditions on the site typical	for this time of	year?	Yes	No X (If no, ex	plain in Remarks.)	
Are Vegetation , Soil , or Hydrology	significantly of	disturbed? A	re "Normal	 Circumstances" present	? Yes X N	0
Are Vegetation , Soil , or Hydrology				rplain any answers in Re		
SUMMARY OF FINDINGS – Attach site m	-		g point lo	cations, transects	, important feat	tures, etc.
Hydrophytic Vegetation Present? Yes X	No	Is the	Sampled A	Area		
	No		n a Wetland		No	
laai a aaa aa aa aa aa aa <del>aa </del>	No					
Remarks:		<u>'</u>				
Climatic conditions wetter than normal (USACE Ante	cedent Precip	itation Tool).				
VEGETATION – Use scientific names of	nlante					
VEGETATION - 03e scientific flames of	Absolute	Dominant	Indicator	Τ		
Tree Stratum (Plot size:30 ft)	% Cover	Species?	Status	Dominance Test wo	rksheet:	
1				Number of Dominant	Species That	
2.				Are OBL, FACW, or I	FAC:	1 (A)
3				Total Number of Don Across All Strata:	ninant Species	1 (B)
		=Total Cover		Percent of Dominant	Species That	<u> </u>
Sapling/Shrub Stratum (Plot size: 15 ft	)			Are OBL, FACW, or I		0.0% (A/B
1						
2				Prevalence Index w		
3.				Total % Cover o		
4 5.				_ · · · · —	0 x1 =	<u>0</u> 180
J		=Total Cover			10 x 3 =	30
Herb Stratum (Plot size: 5 ft )		10101 00101		· —	0 x 4 =	0
1. Phalaris arundinacea	90	Yes	FACW	· —	0 x 5 =	0
2. Equisetum arvense	10	No	FAC	Column Totals: 1	00 (A)	210 (B)
3				Prevalence Index	= B/A =2.10	)
4						
5.				Hydrophytic Vegeta		
6.				1 - Rapid Test to X 2 - Dominance T	r Hydrophytic Veget	ation
7. 8.				X 3 - Prevalence Ir		
				l —	l Adaptations¹(Provi	de supportino
10				<u> </u>	ks or on a separate	
11.				5 - Wetland Non-	-Vascular Plants <sup>1</sup>	•
	100	=Total Cover		Problematic Hyd	rophytic Vegetation <sup>1</sup>	<sup>1</sup> (Explain)
Woody Vine Stratum (Plot size: 15 ft	_)			<sup>1</sup> Indicators of hydric s	soil and wetland hyd	Irology must
1				be present, unless di	sturbed or problema	atic.
2		-Total Cause		Hydrophytic		
% Bare Ground in Herb Stratum		=Total Cover		Vegetation Present? Yes	X No	
Remarks:				1		_

SOIL Sampling Point: W2-SP1

DepthM	latrix	Redo	x Featur	es						
inches) Color (mo	oist) %	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Text	ure		Remarks	
0-2 10YR 2	2/1 100					Mu	ck			
2-16 2.5Y 4/	/2 95	7.5YR 4/6	5	С	M	Sandy/k	<b>Olaiy</b> ey		sandy loam	
	<del></del>					-				
Type: C=Concentration,	——— ——— D=Depletion, RM	======================================	CS=Cove	ered or C	oated S	and Grains.	<sup>2</sup> Loca	tion: PL=Por	e Lining, M=N	/latrix.
lydric Soil Indicators: (A	Applicable to all	LRRs, unless other	erwise n	oted.)			Indicator	s for Probler	natic Hydric	Soils <sup>3</sup> :
Histosol (A1)		Sandy Gle	yed Mat	rix (S4)			2 cm	Muck (A10) (	LRR A, E)	
Histic Epipedon (A2)		Sandy Red	dox (S5)				Iron-l	∕langanese M	lasses (F12) (	LRR D)
Black Histic (A3)		Stripped M	,	,				Parent Materi	` '	
Hydrogen Sulfide (A4)		Loamy Mu	•	` '	(except	MLRA 1)			Surface (F22	)
1 cm Muck (A9) (LRR		Loamy Gle	-				Other	(Explain in F	Remarks)	
X Depleted Below Dark	` ,	X Depleted N					2			
Thick Dark Surface (A	-	Redox Da		` '					tic vegetation	
Sandy Mucky Mineral	` '	Depleted [		` '				, ,,	must be pres	ent,
2.5 cm Mucky Peat or		G) Redox De	pression	s (F8)			unies	s disturbed o	r problematic.	
Restrictive Layer (if obset Type:	ervea):									
						Hydric Sc	ail Drasant	2	Voe Y	No
Depth (inches):						Hydric Sc	oil Present	?	Yes X	No
Depth (inches):						Hydric Sc	oil Present	?	Yes X	No
Depth (inches):  Remarks:  YDROLOGY	ators:					Hydric Sc	oil Present	?	Yes X	No
Depth (inches):  Remarks:  YDROLOGY  Vetland Hydrology Indic		ired: check all that a	apply)			Hydric Sc				
Depth (inches):  Remarks:  YDROLOGY  Vetland Hydrology Indic Primary Indicators (minimum)				ves (B9)	(excep		Secondar	y Indicators (	2 or more req	uired)
Depth (inches):  Remarks:  YDROLOGY  Vetland Hydrology Indic  Primary Indicators (minimus  Surface Water (A1)	um of one is requ	Water-Sta	ined Lea				Secondar Wate	y Indicators (. r-Stained Lea		uired)
Depth (inches):  Remarks:  YDROLOGY  Vetland Hydrology Indic Primary Indicators (minimum)	um of one is requ	Water-Sta	ined Lea <b>1, 2, 4A</b> ,	ves (B9) and 4B)			Secondar Wate	y Indicators ( r-Stained Lea <b>A, and 4B</b> )	2 or more req ves (B9) ( <b>ML</b>	uired)
Depth (inches):  Primary Indicators (minimum Surface Water (A1)  X High Water Table (A2)	um of one is requ	Water-Sta	ined Lea <b>1, 2, 4A,</b> (B11)	and 4B)	)		Secondar Wate 44 Drain	y Indicators (. r-Stained Lea	2 or more req ves (B9) ( <b>ML</b>	uired)
Depth (inches):  Primary Indicators (minimum Surface Water (A1)  X High Water Table (A2) X Saturation (A3)	um of one is requ	Water-Sta MLRA Salt Crust	ined Lea <b>1, 2, 4A,</b> (B11) vertebrat	and 4B)	)		Secondar Wate 4,4 Drain Dry-S	y Indicators ( r-Stained Lea A, and 4B) age Patterns Geason Water	2 or more req ves (B9) ( <b>ML</b>	<u>uired)</u> RA 1, 2
Depth (inches):  Primary Indicators (minimum Surface Water (A1)  X High Water Table (A2) X Saturation (A3) Water Marks (B1)	um of one is requ	Water-Sta MLRA Salt Crust Aquatic In	ined Lea <b>1, 2, 4A,</b> (B11) vertebrat Sulfide (	and 4B) tes (B13) Odor (C1	)	t	Secondar Wate 44 Drain Dry-S	y Indicators ( r-Stained Lea A, and 4B) age Patterns Geason Water	2 or more req ves (B9) ( <b>ML</b> (B10) Table (C2) on Aerial Imag	<u>uired)</u> RA 1, 2
Depth (inches):  Primary Indicators (minimus Surface Water (A1)  X High Water Table (A2)  X Saturation (A3)  Water Marks (B1)  Sediment Deposits (B.)	um of one is requ ) 2)	Water-Sta MLRA Salt Crust Aquatic In Hydrogen	ined Lea 1, 2, 4A, (B11) vertebrat Sulfide ( Rhizosph	tes (B13) Odor (C1) eres on I	) ) Living R	t	Secondar Wate 44 Drain Dry-S Satur Geon	y Indicators ( r-Stained Lea A, and 4B) age Patterns season Water ation Visible (	2 or more req ves (B9) ( <b>ML</b> (B10) Table (C2) on Aerial Imag on (D2)	<u>uired)</u> RA 1, 2
Depth (inches):  Primary Indicators (minimum Surface Water (A1)  X High Water Table (A2)  X Saturation (A3)  Water Marks (B1)  Sediment Deposits (B3)	um of one is requ ) 2)	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F	ined Lea 1, 2, 4A, (B11) vertebrat Sulfide ( Rhizosph of Reduc	tes (B13) Odor (C1) eres on I ced Iron (	) ) Living R (C4)	t oots (C3)	Secondar Wate 4/ Drain Dry-S Satur Geon	y Indicators ( r-Stained Lea A, and 4B) age Patterns season Water ation Visible ( norphic Positi	2 or more req ves (B9) ( <b>ML</b> (B10) Table (C2) on Aerial Imag on (D2)	<u>uired)</u> RA 1, 2
Depth (inches):  Primary Indicators (minimum Surface Water (A1)  X High Water Table (A2)  X Saturation (A3)  Water Marks (B1)  Sediment Deposits (B3)  Algal Mat or Crust (B4)	um of one is requ ) 2)	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence	ined Lea  1, 2, 4A, (B11) vertebrate Sulfide ( Rhizosph of Reduct on Reduct	tes (B13) Odor (C1 eres on loced Iron (ction in Ti	) Living R (C4) lled Soil	oots (C3)	Secondar Wate 4,4 Drain Dry-S Satur Geon Shall X FAC-	y Indicators ( r-Stained Lea A, and 4B) age Patterns season Water ation Visible on norphic Positi ow Aquitard ( Neutral Test (	2 or more req ves (B9) ( <b>ML</b> (B10) Table (C2) on Aerial Imag on (D2)	uired) RA 1, 2
Depth (inches):  Remarks:  YDROLOGY  Vetland Hydrology Indice Primary Indicators (minimumanum Surface Water (A1)  X High Water Table (A2)  X Saturation (A3)  Water Marks (B1)  Sediment Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (E1)	um of one is requ  2)  36) Aerial Imagery (B	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Lea 1, 2, 4A, (B11) vertebrate Sulfide ( Rhizosph of Reductor r Stresse	tes (B13) Odor (C1) eres on led Iron (ction in Ti	) Living R (C4) lled Soil	oots (C3)	Secondar Wate 44 Drain Dry-S Satur Geon Shall X FAC- Raise	y Indicators ( r-Stained Lea A, and 4B) age Patterns season Water ation Visible on norphic Positi ow Aquitard ( Neutral Test (	2 or more req ves (B9) ( <b>ML</b> (B10) Table (C2) on Aerial Imag on (D2) D3) (D5) s (D6) ( <b>LRR</b> A	uired) RA 1, 2
Depth (inches):  Remarks:  YDROLOGY  Vetland Hydrology Indice Primary Indicators (minimus Surface Water (A1)  X High Water Table (A2)  X Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (E) Inundation Visible on A	um of one is requ  2)  36) Aerial Imagery (B	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Lea 1, 2, 4A, (B11) vertebrate Sulfide ( Rhizosph of Reductor r Stresse	tes (B13) Odor (C1) eres on led Iron (ction in Ti	) Living R (C4) lled Soil	oots (C3)	Secondar Wate 44 Drain Dry-S Satur Geon Shall X FAC- Raise	y Indicators ( r-Stained Lea A, and 4B) age Patterns Geason Water ation Visible on orphic Positi bow Aquitard ( Neutral Test of	2 or more req ves (B9) ( <b>ML</b> (B10) Table (C2) on Aerial Imag on (D2) D3) (D5) s (D6) ( <b>LRR</b> A	uired) RA 1, 2
Depth (inches):  Primary Indicators (minimum Surface Water (A1)  X High Water Table (A2)  X Saturation (A3)  Water Marks (B1)  Sediment Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B1)  Sparsely Vegetated Ciricled Observations:	um of one is requ  2)  36) Aerial Imagery (Boncave Surface (	Water-Sta  MLRA  Salt Crust  Aquatic In  Hydrogen  Oxidized F  Presence  Recent Iro  Stunted or  Other (Exp	ined Lea 1, 2, 4A, (B11) vertebrat Sulfide ( Rhizosph of Reduc on Reduc r Stresse plain in R	tes (B13) Odor (C1 teres on I ced Iron ( tition in Ti d Plants Remarks)	) Living R (C4) lled Soil	oots (C3)	Secondar Wate 44 Drain Dry-S Satur Geon Shall X FAC- Raise	y Indicators ( r-Stained Lea A, and 4B) age Patterns Geason Water ation Visible on orphic Positi bow Aquitard ( Neutral Test of	2 or more req ves (B9) ( <b>ML</b> (B10) Table (C2) on Aerial Imag on (D2) D3) (D5) s (D6) ( <b>LRR</b> A	uired) RA 1, 2
Depth (inches):  Remarks:  YDROLOGY  Vetland Hydrology Indice Primary Indicators (minimus Surface Water (A1)  X High Water Table (A2)  X Saturation (A3)  Water Marks (B1)  Sediment Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B1)  Surface Soil Cracks (B1)  Sparsely Vegetated Carries (B1)  Signature Surface Water Present?	um of one is requ  2)  36) Aerial Imagery (Boncave Surface (	Water-Sta  MLRA  Salt Crust  Aquatic In  Hydrogen  Oxidized F  Presence  Recent Iro  Stunted or  Other (Exp  (B8)	ined Lea 1, 2, 4A, (B11) vertebrat Sulfide ( Rhizosph of Reduc on Reduc r Stresse plain in R	tes (B13) Ddor (C1 teres on I ted Iron ( tition in Ti d Plants Remarks)	Living R (C4) lled Soil (D1) ( <b>LI</b>	oots (C3)	Secondar Wate 44 Drain Dry-S Satur Geon Shall X FAC- Raise	y Indicators ( r-Stained Lea A, and 4B) age Patterns Geason Water ation Visible on orphic Positi bow Aquitard ( Neutral Test of	2 or more req ves (B9) ( <b>ML</b> (B10) Table (C2) on Aerial Imag on (D2) D3) (D5) s (D6) ( <b>LRR</b> A	uired) RA 1, 2
Depth (inches):  Primary Indicators (minimum Surface Water (A1)  X High Water Table (A2)  X Saturation (A3)  Water Marks (B1)  Sediment Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B1)  Surface Soil Cracks (B1)  Surface Water Marks (B5)  Surface Soil Cracks (B1)  Surface Soil Cracks (B1)  Surface Water Present?	um of one is requ  2)  36) Aerial Imagery (Boncave Surface (  Yes Yes X	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp (B8)	ined Lea  1, 2, 4A, (B11) vertebrat Sulfide ( Rhizosph of Reduc on Reduc or Stresse plain in R	tes (B13) Ddor (C1) teres on I ted Iron ( tition in Ti d Plants Remarks)  nches): _ nches): _	) Living R (C4) lled Soil	oots (C3) s (C6) RR A)	Secondar Wate 44 Drain Dry-S Satur Geon Shall X FAC- Raise	y Indicators ( r-Stained Lea A, and 4B) age Patterns season Water ation Visible on norphic Position Aquitard ( Neutral Test of ed Ant Mound -Heave Humr	2 or more req ves (B9) ( <b>ML</b> (B10) Table (C2) on Aerial Imag on (D2) D3) (D5) s (D6) ( <b>LRR</b> A	uired) RA 1, 2
Depth (inches):  Remarks:  YDROLOGY  Vetland Hydrology Indice Primary Indicators (minimumany Indicators (Minimuman	um of one is requ  2)  36) Aerial Imagery (Boncave Surface (	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp (B8)	ined Lea  1, 2, 4A, (B11) vertebrat Sulfide ( Rhizosph of Reduc on Reduc or Stresse plain in R	tes (B13) Ddor (C1 teres on I ted Iron ( tition in Ti d Plants Remarks)	Living R (C4) (Iled Soil (D1) (LI	oots (C3) s (C6) RR A)	Secondar Wate 44 Drain Dry-S Satur Geon Shall X FAC- Raise	y Indicators ( r-Stained Lea A, and 4B) age Patterns Geason Water ation Visible on orphic Positi bow Aquitard ( Neutral Test of	2 or more req ves (B9) ( <b>ML</b> (B10) Table (C2) on Aerial Imag on (D2) D3) (D5) s (D6) ( <b>LRR</b> A	uired) RA 1, 2
Depth (inches):  Remarks:  YDROLOGY  Vetland Hydrology Indice Primary Indicators (minimus Surface Water (A1)  X High Water Table (A2)  X Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (E Inundation Visible on A Sparsely Vegetated C  Field Observations: Surface Water Present? Vater Table Present? Saturation Present? Saturation Present?	um of one is requ  2)  36) Aerial Imagery (Boncave Surface (  Yes  Yes  X  Yes  X	Water-Sta  MLRA  Salt Crust  Aquatic In  Hydrogen  Oxidized F  Presence  Recent Iro  Stunted or  Other (Exp  (B8)  NoX  NoNo  No	ined Lea  1, 2, 4A, (B11) vertebrat Sulfide ( Rhizosph of Reduc on Reduc r Stresse plain in R  Depth (i Depth (ii	tes (B13) Ddor (C1 teres on I ced Iron ( tition in Ti d Plants Remarks)  nches): _ nches): _ nches): _	CC4) Illed Soil (D1) (LI	oots (C3) s (C6) RR A) Wetland	Secondar  Wate  4/  Drain  Dry-S  Satur  Geon  Shall  X FAC-  Raise Frost	y Indicators ( r-Stained Lea A, and 4B) age Patterns season Water ation Visible on norphic Position Aquitard ( Neutral Test of ed Ant Mound -Heave Humr	2 or more req ves (B9) ( <b>ML</b> (B10) Table (C2) on Aerial Imag on (D2) D3) (D5) s (D6) ( <b>LRR</b> A	uired) RA 1, 2
Depth (inches):  Remarks:  PYDROLOGY  Vetland Hydrology Indication (A1)  X High Water (A1)  X Saturation (A3)  Water Marks (B1)  Sediment Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B1)  Sparsely Vegetated Company (B2)  Veter Table Present?  Veter Table Present?  Includes capillary fringe)  Describe Recorded Data (A1)	um of one is requ  2)  36) Aerial Imagery (Boncave Surface (  Yes  Yes  X  Yes  X	Water-Sta  MLRA  Salt Crust  Aquatic In  Hydrogen  Oxidized F  Presence  Recent Iro  Stunted or  Other (Exp  (B8)  NoX  NoNo  No	ined Lea  1, 2, 4A, (B11) vertebrat Sulfide ( Rhizosph of Reduc on Reduc r Stresse plain in R  Depth (i Depth (ii	tes (B13) Ddor (C1 teres on I ced Iron ( tition in Ti d Plants Remarks)  nches): _ nches): _ nches): _	CC4) Illed Soil (D1) (LI	oots (C3) s (C6) RR A) Wetland	Secondar  Wate  4/  Drain  Dry-S  Satur  Geon  Shall  X FAC-  Raise Frost	y Indicators ( r-Stained Lea A, and 4B) age Patterns season Water ation Visible on norphic Position Aquitard ( Neutral Test of ed Ant Mound -Heave Humr	2 or more req ves (B9) ( <b>ML</b> (B10) Table (C2) on Aerial Imag on (D2) D3) (D5) s (D6) ( <b>LRR</b> A	uired) RA 1, 2
Depth (inches):  Remarks:  YDROLOGY  Vetland Hydrology Indice Primary Indicators (minimus Surface Water (A1)  X High Water Table (A2)  X Saturation (A3)  Water Marks (B1)  Sediment Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B1)  Surface Soil Cracks (B1)  Sparsely Vegetated Carries (B1)  Signature Surface Water Present?	um of one is requ  2)  36) Aerial Imagery (Boncave Surface (  Yes Yes X Yes X Stream gauge, m	Water-Sta  MLRA  Salt Crust  Aquatic In  Hydrogen  Oxidized F  Presence  Recent Iro  Stunted or  Other (Exp  (B8)  No  No  nonitoring well, aeria	ined Lea  1, 2, 4A, (B11) vertebrat Sulfide ( Rhizosph of Reduc on Reduc r Stresse plain in R  Depth (i Depth (ii	tes (B13) Ddor (C1 teres on I ced Iron ( tition in Ti d Plants Remarks)  nches): _ nches): _ nches): _	CC4) Illed Soil (D1) (LI	oots (C3) s (C6) RR A) Wetland	Secondar  Wate  4/  Drain  Dry-S  Satur  Geon  Shall  X FAC-  Raise Frost	y Indicators ( r-Stained Lea A, and 4B) age Patterns season Water ation Visible on norphic Position Aquitard ( Neutral Test of ed Ant Mound -Heave Humr	2 or more req ves (B9) ( <b>ML</b> (B10) Table (C2) on Aerial Imag on (D2) D3) (D5) s (D6) ( <b>LRR</b> A	uired) RA 1, 2

# WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

Project/Site: Bremerton Airport		City/Cour	nty: City of B	remerton	Sampling Date:	10/3/23
Applicant/Owner: Port of Bremerton				State: WA	Sampling Point:	W2-SP2
Investigator(s): M. Brownell, M. Evinger		Section, T	ownship, Ran	ige: SEC 13, T23N, R	1W	
Landform (hillside, terrace, etc.): slope		Local relief (co	oncave, conve	x, none): convex	Slop	be (%): 2
Subregion (LRR): LRR A Lat: 47.48	7285		Long: -12	22.753302	Datum:	NAD83, NAVD88
Soil Map Unit Name: Harstine gravelly ashy sandy loa	ım, 0 to 6 per				fication: none	
Are climatic / hydrologic conditions on the site typical f			Yes	No X (If no, exp		
Are Vegetation, Soil, or Hydrology				ircumstances" present?		)
Are Vegetation, Soil, or Hydrology				lain any answers in Re		
SUMMARY OF FINDINGS – Attach site m	•			-	•	ures. etc.
				<u> </u>	<u> </u>	
	lo X lo X	l l	e Sampled Ar n a Wetland?		No_X_	
	lo <u>X</u>	Within	ii a wellaliu:	163	<u> </u>	
Remarks:						
Climatic conditions wetter than normal (USACE Ante	cedent Preci	oitation Tool).				
,	·	,				
VEGETATION – Use scientific names of I	olants.					
T 01 1 (D) 1 (D) 1	Absolute	Dominant	Indicator	- · - ·		
Tree Stratum (Plot size: 30 ft )	% Cover	Species?	Status	Dominance Test wor		
Alnus rubra     Pseudotsuga menziesii	20	Yes Yes	FACU	Number of Dominant Are OBL, FACW, or F	•	2 (A)
3.			17100	Total Number of Dom		(//)
4.				Across All Strata:	mant Species	4 (B)
	50	=Total Cover		Percent of Dominant	Species That	
Sapling/Shrub Stratum (Plot size: 15 ft				Are OBL, FACW, or F	•	0.0% (A/B
Oemleria cerasiformis	20	Yes	FACU			
2				Prevalence Index wo		
3.				Total % Cover of		<del>_</del> _
4 5.				OBL species FACW species	x 1 = x 2 =	
J	20	=Total Cover		FAC species	x 3 =	
Herb Stratum (Plot size: 5 ft )		Total Cover		FACU species		
1. Phalaris arundinacea	75	Yes	FACW	UPL species	x 5 =	
2. Rubus ursinus	15	No	FACU	Column Totals:	(A)	(B)
3. Equisetum arvense	10	No	FAC	Prevalence Index	= B/A =	
4. Polystichum munitum	5	No	FACU			
5. Blechnum spicant	1	No	FAC	Hydrophytic Vegetat		
6.				1 - Rapid Test for 2 - Dominance Te	· Hydrophytic Veget	ation
7. 8.				3 - Prevalence Inc		
					Adaptations <sup>1</sup> (Provi	de supportino
10					s or on a separate	
11				5 - Wetland Non-	Vascular Plants <sup>1</sup>	,
	106	=Total Cover		Problematic Hydr	ophytic Vegetation <sup>1</sup>	(Explain)
Woody Vine Stratum (Plot size: 15 ft				<sup>1</sup> Indicators of hydric s		
				be present, unless dis	sturbed or problema	tic.
2		<del></del>		Hydrophytic		
% Raro Ground in Horb Stratum		=Total Cover		Vegetation	No. V	
% Bare Ground in Herb Stratum				rieseil! 168	No X	
Remarks:						

SOIL Sampling Point: W2-SP2

Profile Desc Depth	cription: (Descril Matrix			<b>ıment t</b> ı x Featur		ator or o	confirm the	absence o	f indicators.	)	
(inches)	Color (moist)	<u> </u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Tex	ture		Remarks	
0-2	10YR 3/3	100	- ( )				LSättlø			silt loam	
2-11	2.5Y 3/3	100					LSättig/			silt loam	
11-16	2.5Y 4/2		7.5YR 4/6			M					
	2.51 4/2		7.51K 4/0	2		IVI	_ LSamdy	ученну	sandy loam; p	rominent redox	concentrations
							·				
	oncentration, D=D					coated S	Sand Grains		tion: PL=Po		
-	Indicators: (Appl	icable to all LF							s for Proble	-	: Soils <sup>3</sup> :
— Histosol			Sandy Gle						Muck (A10) (		
	pipedon (A2)		Sandy Red						Manganese M		(LRR D)
	istic (A3)		Stripped M	`	,	,			Parent Materi		0)
	en Sulfide (A4)	2)		-		(excep	t MLRA 1)		Shallow Dark	-	2)
	uck (A9) <b>(LRR D, (</b> d Below Dark Surf	•	Loamy Gle	-				Other	(Explain in F	kemarks)	
	ark Surface (A12)	ace (ATT)	Depleted Nedox Dai					<sup>3</sup> Indicator	s of hydrophy	rtic vegetatio	n and
	Mucky Mineral (S1	١	Depleted [		` '	١			nd hydrology	•	
	Mucky Peat or Pea	•			` '	,			s disturbed o		
	Layer (if observe				(. 0)					. p. o.s. o	
Type:											
Depth (i	nches):		_				Hydric S	oil Present	?	Yes	No X
Remarks:	· -		<del></del>								
HYDROLC	)GY										
	drology Indicator	rs:									
_	cators (minimum c		ed: check all that a	(vlage				Secondar	y Indicators (	2 or more re	auired)
-	Water (A1)		Water-Sta		aves (B9)	(excep	ot .		r-Stained Lea		-
	ater Table (A2)				, and 4B				, and 4B)	, , ,	,
Saturati	on (A3)		Salt Crust	(B11)				Drain	age Patterns	(B10)	
Water M	larks (B1)		Aquatic In	vertebra	tes (B13)	)		Dry-S	eason Water	Table (C2)	
Sedimer	nt Deposits (B2)		Hydrogen	Sulfide	Odor (C1	)		Satur	ation Visible	on Aerial Ima	agery (C9)
Drift De	posits (B3)		Oxidized F			_	Roots (C3)	Geom	norphic Positi	on (D2)	
	at or Crust (B4)		Presence						ow Aquitard (	-	
	posits (B5)		Recent Iro						Neutral Test		
	Soil Cracks (B6)		Stunted or				RR A)		d Ant Mound		A)
	ion Visible on Aeria y Vegetated Conca			olain in F	Remarks)	1		Frost-	-Heave Humr	nocks (D7)	
Field Obser		ave Surface (DC	) 				1				
Surface Wat		Yes	No X	Depth (	inches):						
Water Table		Yes			inches):		·				
Saturation P	_	Yes			inches):		Wetlan	d Hydrolog	y Present?	Yes	No X
	pillary fringe)				′ -		·	,			
,	ecorded Data (stream	am gauge, mon	itoring well, aeria	l photos	, previou	s insped	ctions), if av	ailable:			
Domestra											
Remarks:											

# WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

Project/Site: Bremerton Airport		City/Cour	nty: City of	Bremerton	Sampling Date:	10/10/23
Applicant/Owner: Port of Bremerton				State: WA	Sampling Point:	W3-SP1
Investigator(s): M. Brownell, M. Evinger		Section, T	ownship, Ra	ange: SEC 14, T23N, R	1W	
Landform (hillside, terrace, etc.): depression	1	 Local relief (co	ncave, conv	vex, none): concave	Slop	oe (%):0
Subregion (LRR): LRR A Lat: 47.4	85887		Long: -	122.757156	Datum:	NAD83, NAVD88
Soil Map Unit Name: Alderwood gravelly sandy loam	n, 0 to 8 percen	t slopes		NWI classi	fication: none	
Are climatic / hydrologic conditions on the site typical	I for this time of	year?	Yes X	No (If no, ex	olain in Remarks.)	
Are Vegetation, Soil, or Hydrology		-			•	0
Are Vegetation , Soil , or Hydrology	<del></del>			κplain any answers in Re	<u></u>	
SUMMARY OF FINDINGS – Attach site n					•	tures, etc.
Hydrophytic Vegetation Present? Yes X	No	Is the	Sampled A	Area		
	No	l l	n a Wetland		No	
	No					
Remarks:		<u>_</u>				
<b>VEGETATION – Use scientific names of</b>	plants.					
Total Objections (Plateines 200 ft )	Absolute	Dominant	Indicator	Danis Tark	-114-	
Tree Stratum (Plot size: 30 ft )  1.	% Cover	Species?	Status	Dominance Test wo		
2.				Number of Dominant Are OBL, FACW, or F	•	3 (A)
3.				Total Number of Dom		( )
4.				Across All Strata:		3 (B)
		=Total Cover		Percent of Dominant	Species That	
Sapling/Shrub Stratum (Plot size: 15 ft	_)			Are OBL, FACW, or F	AC: 10	0.0% (A/B
Spiraea douglasii	90	Yes	FACW			
2.				Prevalence Index wo		, by
3. 4.				Total % Cover of OBL species 4	f: Multiply 0 x 1 =	<u>и Бу:</u> 40
5.						280
	90	=Total Cover			) x 3 =	0
Herb Stratum (Plot size: 5 ft )				FACU species 0	x 4 =	0
1. Phalaris arundinacea	50	Yes	FACW	UPL species	x 5 =	0
2. Carex obnupta	40	Yes	OBL		· /	320 (B)
3. Poa sp.	10	No		Prevalence Index	= B/A =1.78	3
4.				Hydrophytic Vegeta	tion Indicators.	
56.				, , , ,	· Hydrophytic Veget	ation
7				X 2 - Dominance Te		auon
8.				X 3 - Prevalence In		
9.				4 - Morphological	Adaptations <sup>1</sup> (Provi	de supportino
10				data in Remarl	ks or on a separate	sheet)
11	_			5 - Wetland Non-	Vascular Plants <sup>1</sup>	
	100	=Total Cover		Problematic Hydr	ophytic Vegetation	(Explain)
Woody Vine Stratum (Plot size: 15 ft	_)			<sup>1</sup> Indicators of hydric s		
1.				be present, unless dis	sturbed or problema	IIIC.
2	<del>-</del>	=Total Cover		Hydrophytic		
% Bare Ground in Herb Stratum		Total COVE		Vegetation Present? Yes	_X_ No	_
Remarks:				l		

SOIL Sampling Point: W3-SP1

Profile Desc Depth	ription: (Describe t Matrix	to the dept		<b>ment th</b> Featur		tor or o	confirm the	absence of	indicators.)	
(inches)	Color (moist)	<del></del> _	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Text	ture	Remarks	<b>S</b>
0-7	10YR 2/1	100	- ( /		<u></u>		Silblomyr		silt loam	
7-9	10YR 4/4	100					Siltoalay/		silt clay loa	
9-16	10YR 4/1	93	7.5YR 5/8	7	C		Siltoelay/		silt clay loa	
	1011(4/1		7.511( 5/6			IVI	Зновіаў/	шауну	Silt clay loa	3111
17			Dada ad Matrice O					21	and Discontinuor I	4 N4-4-t
	oncentration, D=Depl Indicators: (Applica					oated S	sand Grains.		on: PL=Pore Lining, Note   for Problematic Hyde	
Histosol		DIE 10 all L	Sandy Gley						luck (A10) (LRR A, E)	
	pipedon (A2)		Sandy Red						anganese Masses (F1	
Black His			Stripped M						arent Material (F21)	2) ( <b>L</b> IXIX <b>D)</b>
	n Sulfide (A4)		Loamy Muc	`	,	(except	t MLRA 1)		hallow Dark Surface (F	<del>-</del> 22)
`	ck (A9) (LRR D, G)		Loamy Gle	-		(oxeop	•,		Explain in Remarks)	
	Below Dark Surface	e (A11)	X Depleted M	•	` '				,	
	rk Surface (A12)	` ,	Redox Dar	-				<sup>3</sup> Indicators	of hydrophytic vegetat	ion and
Sandy M	lucky Mineral (S1)		Depleted D	ark Sur	face (F7)	)		wetland	d hydrology must be p	resent,
2.5 cm M	lucky Peat or Peat (S	62) <b>(LRR G</b>	) Redox Dep	ression	s (F8)			unless	disturbed or problema	tic.
Restrictive L	_ayer (if observed):									
Type: _										
Depth (ir	nches):						Hydric So	oil Present?	Yes X	No
Remarks:										
HYDROLO	GY									
	drology Indicators:									
_	cators (minimum of o	ne is require	ed: check all that a	(vlaa				Secondary	Indicators (2 or more	reauired)
-	Water (A1)		Water-Stair		ives (B9)	(excep	ot .		Stained Leaves (B9) (I	-
	ter Table (A2)				, and 4B)				and 4B)	•
X Saturation	on (A3)		Salt Crust (		,			Drainaç	ge Patterns (B10)	
Water M	arks (B1)		Aquatic Inv	ertebra	tes (B13)			Dry-Se	ason Water Table (C2	2)
Sedimen	t Deposits (B2)		Hydrogen S	Sulfide (	Odor (C1	)		Saturat	tion Visible on Aerial Ir	magery (C9)
Drift Dep	oosits (B3)		Oxidized R	hizosph	eres on l	Living R	Roots (C3)	Geomo	orphic Position (D2)	
Algal Ma	t or Crust (B4)		Presence of	of Reduc	ced Iron (	(C4)		Shallov	v Aquitard (D3)	
	osits (B5)		Recent Iror						eutral Test (D5)	
	Soil Cracks (B6)		Stunted or				RR A)		Ant Mounds (D6) (LR	
	on Visible on Aerial Ir			lain in F	Remarks)			Frost-H	leave Hummocks (D7)	)
<u> </u>	Vegetated Concave	Surface (B	8)							
Field Observ			NI V	- " "						
Surface Water		<u> </u>			nches): _					
Water Table					nches): _	10	Watter	d Uudralaa	Brocent2 Vec V	No
Saturation Pr		s <u>X</u>	No I	Jebru (I	nches): _	10	vvetian	u nyarology	Present? Yes X	No
(includes cap	corded Data (stream	dalide moi	nitoring well serial	nhotos	nrevious	s inener	tions) if ave	ailahle:		
Describe 1/60	onded Data (Stredill	gauge, moi	moning well, aellal	ριισισδ	, previous	a mapet	Juonoj, II ava	anavic.		
Remarks:										

# WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

Project/Site: Bremerton Airport		City/Cou	nty: City of E	Bremerton	Sampling Date:	10/10/23
Applicant/Owner: Port of Bremerton				State: WA	Sampling Point:	W3-SP2
Investigator(s): M. Brownell, M. Evinger		Section, 7	Гownship, Ra	nge: SEC 14, T23N, R	1W	
Landform (hillside, terrace, etc.): toe of slope		—— Local relief (c	oncave, conv	ex, none): convex	Slo	pe (%): 2
Subregion (LRR): LRR A Lat: 47.48		•		122.757114	Datum:	NAD83, NAVD88
Soil Map Unit Name: Alderwood gravelly sandy loam,	0 to 8 percer	nt slopes	_		fication: none	
Are climatic / hydrologic conditions on the site typical			Yes X	No (If no, ex		
Are Vegetation , Soil , or Hydrology		-		Circumstances" present?	•	ın.
Are Vegetation , Soil , or Hydrology				plain any answers in Re	<del></del>	<b>~</b>
SUMMARY OF FINDINGS – Attach site m				-	•	tures, etc.
Hydrophytic Vegetation Present? Yes N	lo X	Is the	e Sampled A	rea		
<u></u>	lo X	1	in a Wetland		NoX	
Wetland Hydrology Present? Yes N	lo X					
Remarks:						
VEGETATION – Use scientific names of p	·					
Tree Stratum (Plot size: 30 ft )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test wo	rksheet:	
Pseudotsuga menziesii	40	Yes	FACU	Number of Dominant		
2. Alnus rubra	40	Yes	FAC	Are OBL, FACW, or F	•	3 (A)
3				Total Number of Dom	inant Species	
4				Across All Strata:		6 (B)
Opening of Ohmah, Otractions (Distraction 45.6)	80	=Total Cover		Percent of Dominant	•	0.00/ (A/D)
Sapling/Shrub Stratum (Plot size: 15 ft 1. Vaccinium ovatum	. <sup>)</sup> 60	Yes	FACU	Are OBL, FACW, or F	AC:	0.0% (A/B)
Gaultheria shallon	20	Yes	FACU	Prevalence Index we	 orksheet:	
Rubus laciniatus	5	No	FACU	Total % Cover of		y by:
4.				OBL species 2	x 1 =	20
5.				FACW species 8	x 2 =	160
	85	=Total Cover				120
Herb Stratum (Plot size: 5 ft )		.,	= 4 0 4 4	·		500
1. Phalaris arundinacea	80	Yes	FACW		0 x 5 =	0 800 (B)
Carex obnupta 3.		Yes	OBL_	Column Totals: 26 Prevalence Index	( )	800 (B)
1				i revalence index	- B/A - 3.02	
5.				Hydrophytic Vegeta	tion Indicators:	
6.					Hydrophytic Veget	tation
7.				2 - Dominance Te	est is >50%	
8				3 - Prevalence In		
9.					Adaptations <sup>1</sup> (Provi	
10					ks or on a separate	sneet)
11	100	=Total Cover		5 - Wetland Non-	vascular Plants ophytic Vegetation	<sup>1</sup> (Evolain)
Woody Vine Stratum (Plot size: 15 ft	)	- rotal Covel			-	
1. (Fibt 322).	. ′			<sup>1</sup> Indicators of hydric s be present, unless dis		
2.				-	•	
		=Total Cover		Hydrophytic Vegetation		
% Bare Ground in Herb Stratum				Present? Yes	No <u>X</u>	
Remarks:						

SOIL Sampling Point: W3-SP2 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features % Loc<sup>2</sup> (inches) Color (moist) Color (moist) % Type<sup>1</sup> Texture Remarks Siltalog/Clayey silt loam 0-3 10YR 3/2 100 100 Silotalion 3/10 layey 3-12 10YR 2/2 silt loam 12-16 10YR 4/1 100 Sittalion authoritance silt loam

<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.							
Hydric Soil Indicators: (Applicable to all LRRs	s, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup>	3:				
Histosol (A1)	Sandy Gleyed Matrix (S4)	2 cm Muck (A10) (LRR A, E)					
Histic Epipedon (A2)	Sandy Redox (S5)	Iron-Manganese Masses (F12) (LRR I	D)				
Black Histic (A3)	Stripped Matrix (S6)	Red Parent Material (F21)					
Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1) (except ML	RA 1) Very Shallow Dark Surface (F22)					
1 cm Muck (A9) (LRR D, G)	Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)					
Depleted Below Dark Surface (A11)	Depleted Matrix (F3)						
Thick Dark Surface (A12)	Redox Dark Surface (F6)	<sup>3</sup> Indicators of hydrophytic vegetation and					
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present,					
2.5 cm Mucky Peat or Peat (S2) (LRR G)	Redox Depressions (F8)	unless disturbed or problematic.					
Restrictive Layer (if observed):							
Туре:							
Depth (inches):	н	ydric Soil Present? Yes No	X				
Remarks:							

The lower soil layer from 12 to 16 inches included approximately 3 percent charcoal in the soil matrix.

#### **HYDROLOGY**

Primary Indicators (minimum of one is requ	ired: check all that apply)	Secondary Indicators (2 or more required)		
Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2		
High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A. and 4B)		
Saturation (A3)	Salt Crust (B11)	Drainage Patterns (B10)		
Water Marks (B1)	Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)		
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)	Oxidized Rhizospheres on Living Roots (C3	Geomorphic Position (D2)		
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Shallow Aquitard (D3)		
Iron Deposits (B5)	Recent Iron Reduction in Tilled Soils (C6)	FAC-Neutral Test (D5)		
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (LRR A)	Raised Ant Mounds (D6) (LRR A)		
Inundation Visible on Aerial Imagery (E		Frost-Heave Hummocks (D7)		
Sparsely Vegetated Concave Surface	(B8)			
Field Observations:				
Surface Water Present? Yes	No X Depth (inches):			
Water Table Present? Yes	No X Depth (inches):			
Saturation Present? Yes	No X Depth (inches): Wet	and Hydrology Present? Yes No X		
(includes capillary fringe)				
Describe Recorded Data (stream gauge, m	onitoring well, aerial photos, previous inspections), if	available:		

# WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

Project/Site: Bremerton Airport		City/Cour	nty: City of B	remerton	Sampling	g Date:	10/10	)/23
Applicant/Owner: Port of Bremerton				State: WA	Sampling	g Point:	W4-	-SP1
Investigator(s): M. Brownell, M. Evinger		Section, T	ownship, Rar	nge: SEC 14, T23N	I, R1W			
Landform (hillside, terrace, etc.): slope		Local relief (co	oncave, conve	ex, none): convex		Slop	e (%):	1_
Subregion (LRR): LRR A Lat: 47.48	3960		Long: <u>-1</u>	22.760450		Datum:	NAD83,	NAVD88
Soil Map Unit Name: Alderwood gravelly sandy loam,	0 to 8 percer	nt slopes		NWI cla	assification: PE	EM1C		
Are climatic / hydrologic conditions on the site typical for	or this time o	f year?	Yes X	No (If no,	explain in Ren	narks.)		
Are Vegetation, Soil, or Hydrology	significantly	disturbed? A	re "Normal C	ircumstances" prese			,	
Are Vegetation, SoilX_, or Hydrology				olain any answers in				-
SUMMARY OF FINDINGS – Attach site m				•	•	nt feat	ures,	etc.
Hydrophytic Vegetation Present? Yes X N	o	Is the	Sampled A	rea				
	0	withi	n a Wetland?	Yes	X No			
Wetland Hydrology Present? Yes X N	°							
Remarks:								
Sample plot is located near the wetland boundary, ap	proximately	15 feet from pe	ermanently po	onded water and slig	htly upslope.			
VEGETATION – Use scientific names of p	olants.							
Tree Stratum (Plot size: 30 ft )	Absolute % Cover	Dominant Species?	Indicator	Dominance Test	workshoot:			
1. (Flot size)	70 COVEI	Species:	_Status_	Number of Domina		_4		
2.				Are OBL, FACW,			2	(A)
3.				Total Number of D		ies		- ` ′
4.				Across All Strata:	•		2	_(B)
		=Total Cover		Percent of Domina	ant Species Th	at		
Sapling/Shrub Stratum (Plot size: 15 ft	)			Are OBL, FACW,	or FAC:	100	0.0%	_ (A/B
1. Spiraea douglasii	40	Yes	FACW	Dunielanas Inda				
Salix lasiandra     Vaccinium ovatum	<u>5</u> 3	No No	FACU FACU	Prevalence Index Total % Cove		Multiply	hv.	
4.			<u> </u>	OBL species			0 0	-
5.				FACW species			90	-
	48	=Total Cover		FAC species	0 x 3	3 =	0	_
Herb Stratum (Plot size: 5 ft )				FACU species	3 x 4	4 =	12	_
1. Phalaris arundinacea	100	Yes	FACW	UPL species	0 x 5	5 =	0	_
2.				Column Totals:	``		02	_ (B)
3				Prevalence Ind	ex = B/A =	2.04		-
4 5.				Hydrophytic Veg	otation Indica	tore		
6.					t for Hydrophyt		ation	
7				X 2 - Dominance		-		
8.				X 3 - Prevalence				
9.				4 - Morpholog	ical Adaptation	ıs¹(Provid	le supp	porting
10				data in Ren	narks or on a s	eparate s	sheet)	
11					on-Vascular Pl			
Marcha Vina Obaha (District		=Total Cover		<del></del>	lydrophytic Ve	_		
Woody Vine Stratum (Plot size: 15 ft	,			<sup>1</sup> Indicators of hydr				must
1			—— }	be present, unless	uisturbed or p	noniemat	16.	
2		=Total Cover		Hydrophytic				
% Bare Ground in Herb Stratum0				Vegetation Present? Y	'esX	No		
Remarks:								

SOIL Sampling Point: W4-SP1

Profile Desc Depth	ription: (Describe to Matrix	o the depth		<b>ment th</b> Featur		itor or o	confirm the	absence of	indicators.)		
(inches)	Color (moist)	<u></u> %	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Tex	ture	Re	marks	
0-6	10YR 2/1	100	Color (moist)	70	Турс			ıck	110	manto	
6-12	10YR 3/2	100	_					l@l/alloenm	sandv	clay loam	<u> </u>
12-16	10YR 2/1	75	_					ionalean Balalean		clay loam	
12-16	7.5YR 3/2	25					Loamy/		5449	J. L. J. J. L.	<u>.                                      </u>
12-10	7.511( 5/2		_				Loaniy	Olaycy			
<sup>1</sup> Type: C=Co	oncentration, D=Deple	etion. RM=F	Reduced Matrix. C	S=Cove	ered or C	oated S	Sand Grains		on: PL=Pore Lir	nina. M=N	Matrix.
	ndicators: (Applical					outou c	dia Granio		for Problematic		
Histosol			Sandy Gley		-				luck (A10) (LRR	-	
	ipedon (A2)		Sandy Red	ox (S5)	. ,			Iron-M	anganese Masse	es (F12) (	LRR D)
Black His	stic (A3)		Stripped M	atrix (S6	3)			Red Pa	arent Material (F	21)	
Hydroge	n Sulfide (A4)		Loamy Mud	cky Mine	eral (F1)	(except	t MLRA 1)	Very S	hallow Dark Surf	face (F22	)
1 cm Mu	ck (A9) (LRR D, G)		Loamy Gle	yed Mat	trix (F2)			Other (	(Explain in Rema	ırks)	
Depleted	Below Dark Surface	(A11)	Depleted M	latrix (F	3)						
Thick Da	rk Surface (A12)		Redox Dar	k Surfac	ce (F6)			<sup>3</sup> Indicators	of hydrophytic v	egetation	and
	ucky Mineral (S1)		Depleted D		` '	)			d hydrology mus		ent,
2.5 cm M	lucky Peat or Peat (S	2) <b>(LRR G)</b>	Redox Dep	ression	s (F8)			unless	disturbed or pro	blematic.	
	ayer (if observed):										
Type: _	1 \		_								
Depth (ir	iches):						Hydric S	oil Present?	Ye	s <u>X</u>	No
Remarks:											
	do not meet any hyd inches. The sample							•			s is present
але аррег		prot corrida.		py	-9-141.01						
HYDROLO	GY										
Wetland Hyd	drology Indicators:										
Primary Indic	ators (minimum of or	e is require	ed; check all that a	pply)				Secondary	Indicators (2 or	more requ	uired)
Surface	Water (A1)		Water-Stair	ned Lea	ives (B9)	(excep	t	Water-	Stained Leaves	(B9) ( <b>MLI</b>	RA 1, 2
·	ter Table (A2)				and 4B)	)		•	and 4B)		
X Saturation	` '		Salt Crust (						ge Patterns (B10	•	
	arks (B1)		Aquatic Inv		, ,				eason Water Tab	, ,	(00)
	t Deposits (B2)		Hydrogen S				) t - (OO)		tion Visible on A	-	ery (C9)
	osits (B3) t or Crust (B4)		Oxidized R Presence of			_	(00IS (C3)	_	orphic Position ([	J2)	
`	osits (B5)		Recent Iron		,	,	ls (C6)		w Aquitard (D3) leutral Test (D5)		
	Soil Cracks (B6)		Stunted or					_	I Ant Mounds (D	6) (I RR 4	<b>(</b> )
	on Visible on Aerial In	nagery (B7)					,		Heave Hummock		•/
	Vegetated Concave	,			,					( )	
Field Observ	vations:										
Surface Wate	er Present? Yes	i	No X I	Depth (i	nches):						
Water Table					nches):						
Saturation Pr	resent? Yes	x X		Depth (i	nches):	1	Wetlan	d Hydrology	Present? Yes	sX	No
(includes cap	illary fringe)	_									
Describe Red	corded Data (stream	gauge, mon	itoring well, aerial	photos	, previous	s inspec	ctions), if ava	ailable:			
Remarks:											

# WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

Project/Site: Bremerton Airport		City/Cou	nty: City of I	Bremerton	_ Sampling Date	e: <u>10/10/23</u>
Applicant/Owner: Port of Bremerton				State: WA	Sampling Poin	t: <u>W4-SP2</u>
Investigator(s): M. Brownell, M. Evinger		Section, T	ownship, Ra	inge: SEC 14, T23N, F	R1W	
Landform (hillside, terrace, etc.): top of slope		Local relief (co	oncave, conv	ex, none): convex	S	lope (%): 0
Subregion (LRR): LRR A Lat: 47.4	83949		Long: -	122.760574	 Datum	1: NAD83, NAVD88
Soil Map Unit Name: Alderwood gravelly sandy loam	, 0 to 8 percei	nt slopes			ification: PEM1C	
Are climatic / hydrologic conditions on the site typical	for this time of	f year?	Yes X	No (If no, ex	-	
Are Vegetation, Soil, or Hydrology		-	Are "Normal (	Circumstances" present	· Yes X	No
Are Vegetation, Soil, or Hydrology	<del></del>			xplain any answers in Ro		
SUMMARY OF FINDINGS – Attach site n					·	atures, etc.
Hydrophytic Vegetation Present? Yes	No X	Is the	Sampled A	rea		
	No X		n a Wetland		No X	
	No X				- —	
Remarks:		•				
Approximately ten feet from Wetland 4 outlet (Stream	m 4)					
VEGETATION – Use scientific names of	plants.					
	Absolute	Dominant	Indicator			
Tree Stratum (Plot size: 30 ft )	% Cover	Species?	Status	Dominance Test wo	rksheet:	
1. Alnus rubra 2.	10	Yes	FAC	Number of Dominant Are OBL, FACW, or	•	2 (A)
3.	_			Total Number of Don		(A)
4.	_			Across All Strata:	illiant Species	5 (B)
	10	=Total Cover		Percent of Dominant	Species That	
Sapling/Shrub Stratum (Plot size: 15 ft	_)			Are OBL, FACW, or	FAC:	40.0% (A/B
1. Gaultheria shallon	80	Yes	FACU			
2. Vaccinium ovatum		No No	FACU	Prevalence Index w		
3. Spiraea douglasii	<u>5</u>	No No	FACW_UPL	Total % Cover of OBL species		ply by:
Cytisus scoparius     5.		INU	UPL	· -	0 x 1 = 15 x 2 =	30
o	110	=Total Cover		· -	10 x 3 =	30
Herb Stratum (Plot size: 5 ft )				· -	15 x 4 =	460
1. Phalaris arundinacea	10	Yes	FACW	UPL species	5 x 5 =	25
2. Rubus ursinus	10	Yes	FACU	Column Totals: 1	45 (A)	545 (B)
3. Polystichum munitum	5	Yes	FACU	Prevalence Index	= B/A =3.	.76
4.	_					
5				Hydrophytic Vegeta		4 . 4!
6.					r Hydrophytic Veg	etation
7. 8.	_			2 - Dominance T 3 - Prevalence Ir		
9.					luex is ≤3.0 I Adaptations¹(Pro	wido supporting
10.	_				ks or on a separat	
11	_				-Vascular Plants <sup>1</sup>	.5 511551)
• • •	 25	=Total Cover			rophytic Vegetatio	n <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size: 15 ft	)			¹Indicators of hydric		
1.				be present, unless di		
2.	_			Hydrophytic		<del></del>
		=Total Cover		Vegetation		
% Bare Ground in Herb Stratum				Present? Yes	No	<u>×</u>
Remarks:	ding chara s	d an ald bases	or chowed st	ump within the comple	olot	
No trees are pressent though there are several stan	uniy shays ah	an olu beave	on onewea st	amp within the sample p	not.	

SOIL Sampling Point: W4-SP2 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redo	x Featu	res					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Text	ure	Remarks	<b>.</b>
0-6	10YR 3/3	100					Siddann	Clayey	silt loam	
6-16	10YR 3/6	100					Graselly/	Silayeaym	gravelly silt lo	oam
										_
¹Type: C=C	·   ———————————————————————————————————	letion, RM=R	educed Matrix, (	CS=Cov	ered or C	oated S	and Grains.	<sup>2</sup> Location: F	L=Pore Lining, M	л=Matrix.
Hydric Soil	Indicators: (Applica	able to all LR	Rs, unless other	erwise r	noted.)			Indicators for P	roblematic Hydr	ric Soils <sup>3</sup> :
Histosol	I (A1)		Sandy Gle	eyed Ma	trix (S4)			2 cm Muck (	A10) (LRR A, E)	
Histic E	pipedon (A2)		Sandy Re	dox (S5)	)			Iron-Mangar	ese Masses (F12	2) <b>(LRR D)</b>
Black H	istic (A3)		Stripped M	/latrix (S	66)			Red Parent	Material (F21)	
Hydroge	en Sulfide (A4)		Loamy Mu	ıcky Min	eral (F1)	(except	MLRA 1)	Very Shallov	v Dark Surface (F	<sup>-</sup> 22)
1 cm Mu	uck (A9) (LRR D, G)		Loamy Gle					Other (Expla	in in Remarks)	
Deplete	d Below Dark Surface	e (A11)	Depleted I	Matrix (F	=3)					
Thick D	ark Surface (A12)		Redox Da		, ,			<sup>3</sup> Indicators of hyd		
	Mucky Mineral (S1)		Depleted I		•	)		-	ology must be pr	
2.5 cm l	Mucky Peat or Peat (	S2) (LRR G)	Redox De	pressior	ns (F8)			unless distu	bed or problema	tic.
Restrictive	Layer (if observed):									
Type:			_							
Depth (i	inches):		_				Hydric Sc	oil Present?	Yes	NoX
Remarks:										
HYDROLO	OGY									
Wetland Hy	drology Indicators:									
Primary Indi	cators (minimum of o	ne is require	d; check all that a	apply)				Secondary Indica	ators (2 or more r	equired)
Surface	Water (A1)		Water-Sta	ined Lea	aves (B9)	(excep	t	Water-Staine	ed Leaves (B9) ( <b>I</b>	VILRA 1, 2
<u> </u>	ater Table (A2)				, and 4B	)		4A, and	,	
Saturati	on (A3)		Salt Crust	(B11)				Drainage Pa	tterns (B10)	
Water M	//arks (B1)		Aquatic In	vertebra	ates (B13)	)		Drv-Season	Water Table (C2)	)

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is re	quired; check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2
High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3)	Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1)	Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Oxidized Rhizospheres on Living Root	ts (C3) Geomorphic Position (D2)
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5)	Recent Iron Reduction in Tilled Soils (	C6) FAC-Neutral Test (D5)
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (LRR	Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Aerial Imagery	(B7) Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface	e (B8)	_
Field Observations:		
Surface Water Present? Yes	No X Depth (inches):	
Water Table Present? Yes	No X Depth (inches):	
Saturation Present? Yes	No X Depth (inches):	Wetland Hydrology Present? Yes No X
(includes capillary fringe)		
Describe Recorded Data (stream gauge	monitoring well, aerial photos, previous inspection	ns), if available:
Remarks:		
•		

# WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

Project/Site: Bremerton Airport		City/Cour	nty: City of E	Bremerton		Sampling Date	e: <u>10/10/23</u>	
Applicant/Owner: Port of Bremerton				State:	WA	Sampling Point	t: <u>W4-SP3</u>	3
Investigator(s): M. Brownell, M. Evinger		Section, T	ownship, Ra	nge: SEC 1	4, T23N, R1\	N		
Landform (hillside, terrace, etc.): terrace	1	 _ocal relief (co	oncave, conv	ex, none): r	none	SI	ope (%): 0	)
Subregion (LRR): LRR A Lat: 47.4834	110		Long: -1	- 122.760645		 Datum	I: NAD83, NAVD	088
Soil Map Unit Name: Alderwood gravelly sandy loam, 0	to 8 percen	t slopes			NWI classific			
Are climatic / hydrologic conditions on the site typical for			Yes X			ain in Remarks.)	)	
Are Vegetation, Soil, or Hydrologysi		-			` .			
Are Vegetation , Soil X , or Hydrology na				plain any ans				
SUMMARY OF FINDINGS – Attach site maj				•		·	atures, etc	С.
Hydrophytic Vegetation Present? Yes X No		Is the	Sampled A	rea				
			n a Wetland		Yes X	No		
Wetland Hydrology Present? Yes X No								
Remarks:		•						
VEGETATION – Use scientific names of pla								
Tree Stratum (Plot size: 30 ft )	Absolute % Cover	Dominant Species?	Indicator Status	Dominanc	e Test work	sheet.		
1. Alnus rubra	15	Yes	FAC		Dominant Sr			
2.					FACW, or FA		3 (A)	)
3.				Total Numb	ber of Domina	ant Species		
4				Across All	Strata:	· <u> </u>	3 (B)	)
	15	=Total Cover			Dominant Sp			
Sapling/Shrub Stratum (Plot size: 15 ft )	50	V	E 4 O V 4	Are OBL, F	FACW, or FA	C:1	100.0% (A/	/B
Spiraea douglasii     Frangula purshiana	2	Yes No	FACW FAC	Drovalonce	e Index worl	kshoot:		_
3.			TAC		e index work % Cover of:		oly by:	
4.				OBL specie		x 1 =	0	
5.				FACW spe	cies 150	x 2 =	300	
	52	=Total Cover		FAC specie	es 17	x 3 =	51	
Herb Stratum (Plot size: 5 ft )				FACU spec		x 4 =	0	
Phalaris arundinacea	100	Yes	FACW_	UPL specie		x 5 =	0	
2. 3.				Column To		` ´ _	351 (B)	)
<u> </u>				Prevalei	nce Index =	D/A	10	
5.				Hydrophyt	tic Vegetatic	on Indicators:		_
6.					_	lydrophytic Veg	etation	
7.				X 2 - Dor	minance Test	t is >50%		
8					valence Inde			
9						daptations <sup>1</sup> (Pro		inç
10						or on a separat ascular Plants <sup>1</sup>	e sheet)	
11	100	=Total Cover				ascular Plants ohytic Vegetation	n <sup>1</sup> (Evolain)	
Woody Vine Stratum (Plot size: 15 ft )	100	- rotal Covel		_		-		.+
1						l and wetland hy irbed or problem		iι
2.								_
		=Total Cover		Hydrophyt Vegetatior				
% Bare Ground in Herb Stratum				Present?	Yes _	X No		
Remarks:								

SOIL Sampling Point: W4-SP3

Profile Desc Depth	ription: (Describe t Matrix	o the depti		ment the Feature		tor or o	confirm the al	bsence of	indicators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Textur	re	Remark	6
0-9	10YR 2/1	100					Siltodany/loi		silt clay loa	
9-16	10YR 2/2	80	10YR 3/4	20	C	M	Saundynçley		sandy clay I	
	1011(2/2		10111074				<u>Callady</u>		odridy oldy i	<u> </u>
	-									
			_							
	oncentration, D=Depl					oated S			on: PL=Pore Lining, I	
_	ndicators: (Applica	ble to all L			•		I		for Problematic Hyd	
Histosol			Sandy Gle		٠, ,		_		luck (A10) (LRR A, E)	
	ipedon (A2)		Sandy Red				_		anganese Masses (F1	2) <b>(LRR D)</b>
— Black His	` '		Stripped M	`	,				arent Material (F21)	<b></b>
	n Sulfide (A4)		Loamy Mu	•	, ,	(except	_		hallow Dark Surface (	-22)
	ck (A9) (LRR D, G)	(111)	Loamy Gle	-			_	X Other (	Explain in Remarks)	
	l Below Dark Surface irk Surface (A12)	(A11)	Depleted M Redox Dar	•	,		3	Indicators	of hydrophytic vegeta	tion and
	lucky Mineral (S1)		Depleted D						d hydrology must be p	
	lucky Peat or Peat (S	(LRR G			, ,				disturbed or problema	
	_ayer (if observed):	- / - /	<u>′ — '</u>		( - /				<u> </u>	
Type:	,									
Depth (ir	nches):		_				Hydric Soil	Present?	Yes X	No
Remarks:						!				<u> </u>
Though redo	xomorphic concentra	tions were	observed in the ma	atrix at 9	inches,	the soil	s do not meet	the require	ments to be consider	ed hydric. The
sample plot of	contained hydrophytic	vegetation	and soils saturate	ed to a d	lepth of 8	inches	therefore, soi	ls are cons	idered to be hydric.	
HYDROLO										
_	drology Indicators:						,	O	l	
-	ators (minimum of or	ne is require			(BO)	/avaan		-	Indicators (2 or more	-
	Water (A1) ter Table (A2)		Water-Stai		٠, ,				Stained Leaves (B9) ( and 4B)	WILKA 1, 2
X Saturation	` ,		Salt Crust		and 4B)	,		•	ge Patterns (B10)	
	arks (B1)		Aquatic Inv		tes (R13)		_		ason Water Table (C2	2)
	it Deposits (B2)		Hydrogen S		, ,		-		tion Visible on Aerial I	•
	osits (B3)		Oxidized R				oots (C3)		orphic Position (D2)	
	t or Crust (B4)		Presence of			_	` ′ _		v Aquitard (D3)	
`	osits (B5)		Recent Iro	n Reduc	tion in Ti	lled Soi	ls (C6)		eutral Test (D5)	
Surface	Soil Cracks (B6)		Stunted or	Stresse	d Plants	(D1) ( <b>L</b> l	RR A)	Raised	Ant Mounds (D6) (LF	RR A)
Inundation	on Visible on Aerial Ir	nagery (B7)	Other (Exp	lain in R	Remarks)			Frost-H	leave Hummocks (D7	)
Sparsely	Vegetated Concave	Surface (B	8)							
Field Obser	vations:									
Surface Water	er Present? Yes	s		Depth (i	nches): _					
Water Table			No X	Depth (i	nches): _					
Saturation P		s_X_	No	Depth (i	nches): _	88	Wetland	Hydrology	Present? Yes X	No
(includes cap							1			
Describe Re	corded Data (stream	gauge, mor	nitoring well, aerial	photos,	, previous	sinspec	ctions), if availa	able:		
Remarks:										

# WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

Project/Site: Bremerton Airport		City/Cour	nty: City of	Bremerton	Sampling Date:	10/10/23
Applicant/Owner: Port of Bremerton				State: WA	Sampling Point:	W4-SP4
Investigator(s): M. Brownell, M. Evinger		Section, T	ownship, Ra	ange: SEC 14, T23N, F	R1W	
Landform (hillside, terrace, etc.): terrace		Local relief (co	ncave, con	vex, none): none	Slop	oe (%): <u>0</u>
Subregion (LRR): LRR A Lat: 47.4	183420		Long:	122.760675	Datum:	NAD83, NAVD88
Soil Map Unit Name: Alderwood gravelly sandy loan	n, 0 to 8 percen	t slopes		NWI classi	ification: none	
Are climatic / hydrologic conditions on the site typica	I for this time of	f year?	Yes X	No (If no, ex	plain in Remarks.)	
Are Vegetation, Soil, or Hydrology	significantly	disturbed? A	re "Normal	 Circumstances" present	? Yes X N	0
Are Vegetation , Soil , or Hydrology	<del></del>			· κplain any answers in Re	<u></u>	
SUMMARY OF FINDINGS – Attach site r	_		g point lo	cations, transects	, important feat	ures, etc.
Hydrophytic Vegetation Present? Yes X	No	Is the	Sampled A	.rea		
	No X	l l	n a Wetland		No X	
Wetland Hydrology Present? Yes	No X				- —	
Remarks:						
VEGETATION – Use scientific names of	Absolute	Dominant	Indicator	T		
<u>Tree Stratum</u> (Plot size: 30 ft )	% Cover	Species?	Status	Dominance Test wo	rksheet:	
1. Alnus rubra 2.	20	Yes	FAC	Number of Dominant Are OBL, FACW, or F	•	3 (A)
3.				Total Number of Dom Across All Strata:		3 (B)
4.		=Total Cover			Charles That	<u> </u>
Sapling/Shrub Stratum (Plot size: 15 ft	)			Percent of Dominant Are OBL, FACW, or F		0.0% (A/B
1. Spiraea douglasii	30	Yes	FACW	,		
2				Prevalence Index w	orksheet:	
3.				Total % Cover o	·	
4				<u> </u>	0 x1=	0
5	30	=Total Cover		· ·	<del></del>	260 60
Herb Stratum (Plot size: 5 ft )		- Total Cover		· —	0 x4=	0
1. Phalaris arundinacea	100	Yes	FACW	· —	0 x5=	0
2.						320 (B)
3.				Prevalence Index	= B/A = 2.13	3
4						
5				Hydrophytic Vegeta		
6.					r Hydrophytic Veget	ation
7.				X 2 - Dominance T 3 - Prevalence In		
8 9.					idex is ≤3.0 I Adaptations¹(Provi	de supportin
10					ks or on a separate	
10 11.				5 - Wetland Non-		,
	100	=Total Cover		Problematic Hyd	rophytic Vegetation <sup>1</sup>	(Explain)
Woody Vine Stratum (Plot size: 15 ft 1.	_)			<sup>1</sup> Indicators of hydric s be present, unless di		
2.				·		
% Bare Ground in Herb Stratum		=Total Cover		Hydrophytic Vegetation Present? Yes	X No	
Remarks:				1		

SOIL Sampling Point: W4-SP4

Profile Desc Depth	cription: (Describe Matrix	to the dept		<b>ıment tl</b> x Featur		itor or o	confirm the	absence of i	ndicators.)		
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Tex	ture	F	Remarks	
0-8	10YR 2/1	100	, ,				salrodnyngl		sand	ly clay loar	n
8-16	10YR 3/4	100					sandynyl			ly clay loar	
							Loaniy	Giayoy	Carro	iy olay loal	
	· -										
	Concentration, D=Dep					oated S	and Grains		n: PL=Pore l		
-	Indicators: (Applic	able to all L							or Problema	-	Soils*:
— Histosol			Sandy Gle						ıck (A10) <b>(LR</b>		(I DD D)
	pipedon (A2)		Sandy Red	, ,					nganese Mas		(LKK D)
	istic (A3)		Stripped M	,	,	/avaant	MI DA 4\		ent Material (		<b>)</b> \
_ ' '	en Sulfide (A4)		Loamy Mu	-		(excepi	LIVILKA 1)		allow Dark Su	-	<del>2</del> )
	uck (A9) <b>(LRR D, G)</b> d Below Dark Surfac		Loamy Gle Depleted N	-				Other (E	Explain in Ren	iiai k5)	
	ark Surface (A12)	~ (\(\tau\)	Redox Dai					<sup>3</sup> Indicators o	f hydrophytic	vegetation	n and
	Mucky Mineral (S1)		Depleted [			١			hydrology mi	•	
′	Mucky Peat or Peat	(S2) (LRR G			` '				listurbed or p		
	Layer (if observed)	• • • • • • • • • • • • • • • • • • • •	<u> </u>						·		
Type:											
Depth (i	inches):						Hydric S	oil Present?	Υ	'es	No X
Remarks:							_				
HYDROLC	OGY										
Wetland Hy	drology Indicators	:									
Primary Indi	cators (minimum of	one is require	ed; check all that a	apply)				Secondary I	ndicators (2 d	r more red	uired)
Surface	Water (A1)		Water-Sta	ned Lea	ives (B9)	(excep	t	Water-S	tained Leave	s (B9) ( <b>ML</b>	RA 1, 2
High Wa	ater Table (A2)		MLRA	1, 2, 4A	, and 4B)	)		•	ind 4B)		
Saturati	on (A3)		Salt Crust	(B11)				Drainag	e Patterns (B	10)	
	/larks (B1)		Aquatic In		, ,				son Water Ta	, ,	
	nt Deposits (B2)		Hydrogen		•	•			on Visible on		gery (C9)
	posits (B3)		Oxidized F			-	loots (C3)		phic Position		
	at or Crust (B4)		Presence				. (00)		Aquitard (D3		
	posits (B5)		Recent Iro						utral Test (D5	-	<b>A</b> \
	Soil Cracks (B6) ion Visible on Aerial	Imaganı (P7	Stunted or Other (Exp			. , .	RR A)		Ant Mounds( eave Hummo		<b>A</b> )
	y Vegetated Concav			лант нт г	(Ciliaiks)				save Hullillio	CKS (D1)	
Field Obser											
Surface Wat	ter Present? Y	es	No X	Depth (i	nches):						
Water Table		es		Depth (i	nches): _						
Saturation P	Present? Y	es			nches):		Wetlan	d Hydrology	Present? Y	'es	No X
(includes ca	pillary fringe)										
Describe Re	ecorded Data (strean	n gauge, mo	nitoring well, aeria	l photos	, previous	s inspec	ctions), if av	ailable:			
Domorko											
Remarks:											
Remarks.											

# WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

Project/Site: Bremerton Airport		City/Cour	nty: City of	Bremerton	Sampling Date:	10/10/23
Applicant/Owner: Port of Bremerton				State: WA	Sampling Point:	W4-SP5
Investigator(s): M. Brownell, M. Evinger		Section, T	ownship, Ra	ange: SEC 14, T23N, R	1W	
Landform (hillside, terrace, etc.): depression		 Local relief (co	ncave, conv	/ex, none): convex	Slop	e (%):0
Subregion (LRR): LRR A Lat: 47.4	85559		Long: -	122.757791	 Datum:	NAD83, NAVD88
Soil Map Unit Name: Shalcar muck				NWI classif	ication: PEM1C	
Are climatic / hydrologic conditions on the site typical	for this time of	year?	Yes X	No (If no, exp	olain in Remarks.)	
Are Vegetation, Soil, or Hydrology	significantly of				Yes X No	)
Are Vegetation , Soil , or Hydrology				κplain any answers in Re		
SUMMARY OF FINDINGS – Attach site n					•	ures, etc.
Hydrophytic Vegetation Present? Yes X	No	Is the	Sampled A	Area		
	No	l l	n a Wetland		No	
	No					
Remarks:		<u>_</u>				
<b>VEGETATION – Use scientific names of</b>	plants.					
Troe Stratum (Diet size: 20 ft )	Absolute % Cover	Dominant	Indicator	Dominanaa Taat wax	rkahaat:	
Tree Stratum (Plot size: 30 ft )  1.	% Cover	Species?	Status	Dominance Test wor		
2.				Number of Dominant : Are OBL, FACW, or F	•	2 (A)
3.				Total Number of Dom	<del></del>	`
4.	_			Across All Strata:	•	2 (B)
	:	=Total Cover		Percent of Dominant S		
Sapling/Shrub Stratum (Plot size: 15 ft	_)			Are OBL, FACW, or F	AC: 100	0.0% (A/B
1. Spiraea douglasii	25	Yes	FACW	Blana landan	l 4.	
2. 3.				Prevalence Index wo Total % Cover of		hu:
				OBL species	: Multiply x 1 =	
5.				FACW species		
-	25	=Total Cover		FAC species	x 3 =	
Herb Stratum (Plot size: 5 ft )				FACU species	x 4 =	
1. Phalaris arundinacea	60	Yes	FACW	UPL species	x 5 =	
2. Sparganium emersum	5	No	OBL	Column Totals:	(A)	(B)
3.				Prevalence Index	= B/A =	
4 5.				Hydrophytic Vegetat	ion Indicators:	
56.				, , , ,	Hydrophytic Vegeta	ation
7.				X 2 - Dominance Te		
8.				3 - Prevalence Inc		
9.				4 - Morphological	Adaptations <sup>1</sup> (Provid	le supportino
10				data in Remark	s or on a separate s	sheet)
11				5 - Wetland Non-		
	65	=Total Cover		Problematic Hydro	ophytic Vegetation <sup>1</sup>	(Explain)
Woody Vine Stratum (Plot size: 15 ft	_)			<sup>1</sup> Indicators of hydric s		
1. 2.				be present, unless dis	turped or problemat	IC.
		=Total Cover		Hydrophytic		
% Bare Ground in Herb Stratum 35		. 3.0. 00701		Vegetation Present? Yes	X No	
Remarks:						
Tromano.						

SOIL Sampling Point: W4-SP5

Depth	Matrix		Redo	x Feature	es		confirm the absence	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-8	10YR 2/1	100					Muck	
8-16	10YR 4/1	74	7.5YR 4/6	25	С		Loamy/Clayey	clay
	1011(4/1	<del>/-</del> _	2.5Y 5/6			M	Loaniy/Olayey	Prominent redox concentrations
			2.51 5/0	1		IVI		Prominent redox concentrations
								-
								-
¹Type: C=Co	oncentration, D=Depleti	on, RM=F	Reduced Matrix, C	S=Cove	ered or C	oated S	and Grains. <sup>2</sup> Loc	ation: PL=Pore Lining, M=Matrix.
Hydric Soil I	Indicators: (Applicable	to all LF	RRs, unless othe	rwise n	oted.)		Indicato	rs for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sandy Gle	yed Mat	rix (S4)		2 cm	Muck (A10) <b>(LRR A, E)</b>
X Histic Ep	pipedon (A2)		Sandy Red	dox (S5)			Iron-	Manganese Masses (F12) (LRR D)
X Black His	stic (A3)		Stripped M	latrix (S6	6)		Red	Parent Material (F21)
Hydroge	n Sulfide (A4)		Loamy Mu	cky Mine	eral (F1)	(except	: <b>MLRA 1)</b> Very	Shallow Dark Surface (F22)
1 cm Mu	ıck (A9) <b>(LRR D, G)</b>		Loamy Gle	yed Mat	rix (F2)		Othe	r (Explain in Remarks)
X Depleted	d Below Dark Surface (A	<b>\11</b> )	X Depleted N	∕latrix (F	3)			
	ark Surface (A12)		Redox Dar		• •		<sup>3</sup> Indicato	rs of hydrophytic vegetation and
	lucky Mineral (S1)		Depleted [		, ,	)		and hydrology must be present,
2.5 cm M	Mucky Peat or Peat (S2)	(LRR G)	Redox De	oression	s (F8)	_	unle	ss disturbed or problematic.
Restrictive L	Layer (if observed):							
Type: _			_					
Depth (ir	nches):		_				Hydric Soil Presen	t? Yes <u>X</u> No
Remarks:								
HYDROLO	GY							
	drology Indicators:							
_								
Surface	cators (minimum or one	is require	ed; check all that a	ipply)			Seconda	ry Indicators (2 or more required)
V High W/o	Water (A1)	is require	ed; check all that a Water-Stai		ves (B9)	(excep		ry Indicators (2 or more required) er-Stained Leaves (B9) ( <b>MLRA 1, 2</b>
∧ ⊓igii wa	`	is require	Water-Stai	ined Lea	` ,		t Wate	
X Saturation	Water (A1) iter Table (A2)	is require	Water-Stai	ined Lea 1, 2, 4A,	ves (B9) and 4B)		t Wate	er-Stained Leaves (B9) (MLRA 1, 2
X Saturation	Water (A1) iter Table (A2)	is require	Water-Stai	ined Lea <b>1, 2, 4A,</b> (B11)	and 4B)	)	t Wate 4 Drain	er-Stained Leaves (B9) (MLRA 1, 2 A, and 4B)
X Saturation Water Ma	Water (A1) hter Table (A2) on (A3)	is require	Water-Stai	ined Lea <b>1, 2, 4A,</b> (B11) vertebrat	and 4B)		tWate	er-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) nage Patterns (B10)
X Saturation Water Mater	Water (A1) Iter Table (A2) on (A3) arks (B1)	is require	Water-Stai MLRA Salt Crust Aquatic Inv	ined Lea  1, 2, 4A,  (B11)  vertebrat  Sulfide (	and 4B) res (B13) Odor (C1)	)	t Wate	er-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) nage Patterns (B10) Season Water Table (C2)
X Saturation Water Mater Material	Water (A1) Ater Table (A2) On (A3) Arks (B1) At Deposits (B2)	is require	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen	ined Lea  1, 2, 4A,  (B11)  vertebrat  Sulfide C  Rhizosph	and 4B) ses (B13) Odor (C1) eres on I	) ) _iving R	### Wate ####################################	er-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) nage Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9)
X Saturation Water Main Sedimen Drift Dep Algal Ma	Water (A1) tter Table (A2) on (A3) tarks (B1) tt Deposits (B2) toosits (B3)	is require	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  X Oxidized F	ined Lea  1, 2, 4A, (B11) vertebrat Sulfide C Rhizosph of Reduc	and 4B)  ees (B13)  Odor (C1)  eres on I  ced Iron (	) _iving R	t	er-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) nage Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) morphic Position (D2)
X Saturation Water Management Sediment Drift Dep Algal Management	Water (A1)  Inter Table (A2)  Inter Table (A2)  Inter Table (B1)  Inter Table (B2)  Inter Table (B2)  Inter Table (B3)  Inter Table (B4)	is require	Water-Stai  MLRA Salt Crust Aquatic Inv Hydrogen X Oxidized F Presence	ined Lea  1, 2, 4A, (B11) vertebrat Sulfide C Rhizosph of Reduc	and 4B) es (B13) Odor (C1) eres on I ed Iron (	) _iving R (C4) Iled Soi	tWate	er-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) nage Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) morphic Position (D2) low Aquitard (D3)
X Saturation Water Management Sediment Drift Dep Algal Management Iron Dep Surface S	Water (A1)  Iter Table (A2)  In (A3)  Iarks (B1)  In Deposits (B2)  Iter Desits (B3)  Iter Office (B4)  Iter Table (A2)  In (A3)  In (A3)	·	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  X Oxidized F  Presence of  Recent Iro  Stunted or	ined Lea  1, 2, 4A, (B11) vertebrat Sulfide C Rhizosph of Reduc n Reduc	and 4B)  es (B13)  Odor (C1)  eres on I  ed Iron ( tion in Ti  d Plants	) _iving R (C4) Iled Soi	t	er-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) nage Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) morphic Position (D2) low Aquitard (D3) -Neutral Test (D5)
X Saturation Water Management Sediment Drift Dep Algal Management Iron Dep Surface Sur	Water (A1) tter Table (A2) on (A3) arks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6)	gery (B7)	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  X Oxidized F  Presence of Recent Iro  Stunted or Other (Exp	ined Lea  1, 2, 4A, (B11) vertebrat Sulfide C Rhizosph of Reduc n Reduc	and 4B)  es (B13)  Odor (C1)  eres on I  ed Iron ( tion in Ti  d Plants	) _iving R (C4) Iled Soi	t	er-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) nage Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) morphic Position (D2) low Aquitard (D3) -Neutral Test (D5) ed Ant Mounds (D6) (LRR A)
X Saturation Water Management Sediment Drift Dep Algal Management Iron Dep Surface Sur	Water (A1)  Iter Table (A2)  In (A3)  Iarks (B1)  In Deposits (B2)  In Or Crust (B4)  In Or Crust (B4)  In Or Crust (B6)  In Or Visible on Aerial Iman  In Vegetated Concave St	gery (B7)	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  X Oxidized F  Presence of Recent Iro  Stunted or Other (Exp	ined Lea  1, 2, 4A, (B11) vertebrat Sulfide C Rhizosph of Reduc n Reduc	and 4B)  es (B13)  Odor (C1)  eres on I  ed Iron ( tion in Ti  d Plants	) _iving R (C4) Iled Soi	t	er-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) nage Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) morphic Position (D2) low Aquitard (D3) -Neutral Test (D5) ed Ant Mounds (D6) (LRR A)
X Saturation Water Management Sediment Drift Dep Algal Management Iron Dep Surface Solution Inundation Sparsely	Water (A1)  Iter Table (A2)  In (A3)  In Deposits (B2)  In Or Crust (B4)  In Or Crust (B4)  In Or Crust (B6)  In Visible on Aerial Imae  In Vegetated Concave Standard	gery (B7)	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  X Oxidized F  Presence of Recent Iro  Stunted or  Other (Exp  No X	ined Lea  1, 2, 4A, (B11) vertebrat Sulfide C Rhizosph of Reduc n Reduc	and 4B) es (B13) Ddor (C1 eres on I ed Iron ( tion in Ti d Plants emarks)	) _iving R (C4) Iled Soi	t	er-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) nage Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) morphic Position (D2) low Aquitard (D3) -Neutral Test (D5) ed Ant Mounds (D6) (LRR A)
X Saturation Water Management Sediment Drift Dep Algal Management Iron Dep Surface Sediment Inundation Sparsely Field Observation	Water (A1)  Iter Table (A2)  In (A3)  Iarks (B1)  In Deposits (B2)  In Crust (B4)  In Crust (B4)  In Cracks (B6)  In Visible on Aerial Image  In Vegetated Concave Survations:  In Present?  Yes  Yes  Yes  Yes	gery (B7) urface (B8	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  X Oxidized F  Presence of Recent Iro  Stunted or Other (Exp  No X	ined Lea 1, 2, 4A, (B11) vertebrat Sulfide C Rhizosph of Reduc n Reduc Stresse blain in R	and 4B) es (B13) Ddor (C1 eres on I ed Iron ( tion in Ti d Plants emarks)	) _iving R (C4) Iled Soi	t	er-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) nage Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) morphic Position (D2) low Aquitard (D3) -Neutral Test (D5) ed Ant Mounds (D6) (LRR A)
X Saturation Water Management Sediment Drift Dep Algal Management Iron Dep Surface Sediment Inundation Sparsely Field Observing Surface Water	Water (A1)  Inter Table (A2)  Inter Table (B2)  Inter Table (B2)  Inter Table (B2)  Inter Table (B4)	gery (B7) urface (B8	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  X Oxidized F  Presence of Recent Iro  Stunted or Other (Exp  No  X  No	ined Lea  1, 2, 4A, (B11) vertebrat Sulfide C Rhizosph of Reduc n Reduc Stresse Dlain in R	and 4B) es (B13) Ddor (C1 eres on I ed Iron ( tion in Ti d Plants emarks)	) Living R (C4) Illed Soi (D1) (LI	t	er-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) nage Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) morphic Position (D2) low Aquitard (D3) -Neutral Test (D5) ed Ant Mounds (D6) (LRR A)
X Saturation Water Management Sediment Drift Dep Algal Management Iron Dep Surface Surface Surface Surface Water Table	Water (A1)  Inter Table (A2)	gery (B7) urface (B8	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  X Oxidized F  Presence of Recent Iro  Stunted or Other (Exp  No  X  No	ined Lea  1, 2, 4A, (B11) vertebrat Sulfide C Rhizosph of Reduc n Reduc Stresse Dlain in R	and 4B) es (B13) Ddor (C1 eres on I ed Iron ( tion in Ti d Plants demarks)  nches): nches):	) Living R (C4) Illed Soi (D1) (LI	t	er-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) nage Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) morphic Position (D2) low Aquitard (D3) -Neutral Test (D5) ed Ant Mounds (D6) (LRR A) t-Heave Hummocks (D7)
X Saturation Water Manager Sedimen Drift Dep Algal Man Iron Dep Surface Some Inundation Sparsely Field Observ Surface Water Table Saturation Pr (includes cap	Water (A1)  Inter Table (A2)	gery (B7) urface (B8 X X	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  X Oxidized F  Presence of Recent Iro  Stunted or Other (Exp  No No No	ined Lea  1, 2, 4A, (B11) vertebrat Sulfide C Rhizosph of Reduc n Reduc Stresse olain in R  Depth (in Depth (in	and 4B) es (B13) Ddor (C1 eres on I ced Iron ( tion in Ti d Plants demarks)  nches): _ nches): _ nches): _	) Living R C4) Illed Soi (D1) (LI	tWate	er-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) nage Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) morphic Position (D2) low Aquitard (D3) -Neutral Test (D5) ed Ant Mounds (D6) (LRR A) t-Heave Hummocks (D7)
X Saturation Water Manager Sediment Drift Dep Algal Manager Iron Dep Surface Signated Signared Signared Signared Signared Signared Signared Signared Signared Saturation Proceedings (includes caped Describe Received)	Water (A1)  Inter Table (A2)	gery (B7) urface (B8 X X	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  X Oxidized F  Presence of Recent Iro  Stunted or Other (Exp  No No No	ined Lea  1, 2, 4A, (B11) vertebrat Sulfide C Rhizosph of Reduc n Reduc Stresse olain in R  Depth (in Depth (in	and 4B) es (B13) Ddor (C1 eres on I ced Iron ( tion in Ti d Plants demarks)  nches): _ nches): _ nches): _	) Living R C4) Illed Soi (D1) (LI	tWate	er-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) nage Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) morphic Position (D2) low Aquitard (D3) -Neutral Test (D5) ed Ant Mounds (D6) (LRR A) t-Heave Hummocks (D7)
X Saturation Water Manager Sedimen Drift Dep Algal Man Iron Dep Surface Some Inundation Sparsely Field Observ Surface Water Table Saturation Pr (includes cap	Water (A1)  Inter Table (A2)	gery (B7) urface (B8 X X	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  X Oxidized F  Presence of Recent Iro  Stunted or Other (Exp  No No No	ined Lea  1, 2, 4A, (B11) vertebrat Sulfide C Rhizosph of Reduc n Reduc Stresse olain in R  Depth (in Depth (in	and 4B) es (B13) Ddor (C1 eres on I ced Iron ( tion in Ti d Plants demarks)  nches): _ nches): _ nches): _	) Living R C4) Illed Soi (D1) (LI	tWate	er-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) nage Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) morphic Position (D2) low Aquitard (D3) -Neutral Test (D5) ed Ant Mounds (D6) (LRR A) t-Heave Hummocks (D7)
X Saturation Water Management Sediment Drift Dep Algal Management Iron Dep Surface Surface Surface Surface Water Water Table Saturation Pr (includes cap Describe Recomment)	Water (A1)  Inter Table (A2)	gery (B7) urface (B8 X X	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  X Oxidized F  Presence of Recent Iro  Stunted or Other (Exp  No No No	ined Lea  1, 2, 4A, (B11) vertebrat Sulfide C Rhizosph of Reduc n Reduc Stresse olain in R  Depth (in Depth (in	and 4B) es (B13) Ddor (C1 eres on I ced Iron ( tion in Ti d Plants demarks)  nches): _ nches): _ nches): _	) Living R C4) Illed Soi (D1) (LI	tWate	er-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) nage Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) morphic Position (D2) low Aquitard (D3) -Neutral Test (D5) ed Ant Mounds (D6) (LRR A) t-Heave Hummocks (D7)

# WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

Project/Site: Bremerton Airport		City/Cour	nty: City of	Bremerton	Sampling Date:	10/10/23
Applicant/Owner: Port of Bremerton				State: WA	Sampling Point:	W4-SP6
Investigator(s): M. Brownell, M. Evinger		Section, T	ownship, Ra	inge: SEC 14, T23N, R	:1W	
Landform (hillside, terrace, etc.): edge of slope		Local relief (co	oncave, conv	ex, none): convex	Slop	oe (%):1_
Subregion (LRR): LRR A Lat: 47.	485612		Long: -	122.757862	Datum:	NAD83, NAVD88
Soil Map Unit Name: Shalcar muck				NWI classi	fication: none	
Are climatic / hydrologic conditions on the site typica	al for this time o	f year?	Yes X	No (If no, ex	plain in Remarks.)	
Are Vegetation, Soil, or Hydrology	significantly	disturbed? A	re "Normal (	 Circumstances" present?	Yes X No	0
Are Vegetation, Soil, or Hydrology	<del></del> '			κρlain any answers in Re	·	
SUMMARY OF FINDINGS – Attach site			g point lo	cations, transects,	, important feat	ures, etc.
Hydrophytic Vegetation Present? Yes	No X	Is the	Sampled A	ırea		
Hydric Soil Present? Yes	No X		n a Wetland		No X	
Wetland Hydrology Present? Yes	No X				· ——	
Remarks:  VEGETATION – Use scientific names o	f plants.					
Tree Charles (Diet size) 20 ft	Absolute	Dominant	Indicator	Daminana Taatuu	when he are	
Tree Stratum (Plot size: 30 ft )  1.	% Cover	Species?	Status	Dominance Test wo		
2.				Number of Dominant Are OBL, FACW, or F	•	1 (A)
3.				Total Number of Dom		` ′
4.				Across All Strata:	· <u> </u>	2 (B)
	, <del></del>	=Total Cover		Percent of Dominant	•	
Sapling/Shrub Stratum (Plot size: 15 ft 1. Gaultheria shallon	) 	Voc	FACU	Are OBL, FACW, or F	AC: <u>50</u>	0.0% (A/B)
Spiraea douglasii		Yes No	FACW	Prevalence Index we		
3.				Total % Cover of		by:
4.				OBL species	0 x 1 =	0
5.	_			FACW species 10	02 x 2 =2	204
	62	=Total Cover			0 x 3 =	0
Herb Stratum (Plot size: 5 ft )	400	V	EA 0\A/	· —		240
Phalaris arundinacea 2.	100	Yes	FACW		0 x 5 =62 (A)	0 444 (B)
3.				Prevalence Index	` ′	` ` ′
4.						
5.				Hydrophytic Vegeta	tion Indicators:	
6				1 - Rapid Test for	r Hydrophytic Veget	ation
7				2 - Dominance Te		
8				3 - Prevalence In		
9.				l —	Adaptations <sup>1</sup> (Provi ks or on a separate	
10				5 - Wetland Non-		sileet)
11		=Total Cover		<b>—</b>	ophytic Vegetation <sup>1</sup>	(Explain)
Woody Vine Stratum (Plot size: 15 ft	)			¹Indicators of hydric s		
1.				be present, unless dis		
2.				Hydrophytic		
% Bare Ground in Herb Stratum0		=Total Cover		Vegetation Present? Yes	No _X	
Remarks:						

SOIL

Sampling Point: W4-SP6

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

Profile Desc Depth	cription: (Describ Matrix	-		<b>ument t</b> l x Featur		ator or o	confirm the	absence of indi	cators.)	
(inches)	Color (moist)		Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Tex	ture	Remarks	
0-7	10YR 3/4	100						±iditayyelay loam	gravelly silty clay	y loam
7-16	10YR 2/1	100					sahodaynsayi		sandy silt loa	
7-10	1011(2/1						Saliebyisyi	пывану	Sality Silt loa	<u> </u>
	-									
	oncentration, D=D					oated S	Sand Grains		PL=Pore Lining, M	
Hydric Soil	Indicators: (Appl	icable to all LR	Rs, unless oth	erwise n	oted.)			Indicators for	Problematic Hydri	ic Soils³:
Histosol	(A1)		Sandy Gle	eyed Mat	trix (S4)			2 cm Muck	(A10) <b>(LRR A, E)</b>	
Histic E <sub>l</sub>	oipedon (A2)		Sandy Re	dox (S5)					anese Masses (F12	2) (LRR D)
	istic (A3)		Stripped N	,	,				t Material (F21)	
· ·	en Sulfide (A4)			-		(except	t MLRA 1)		ow Dark Surface (F	22)
	uck (A9) <b>(LRR D, C</b>	•	Loamy GI	-				Other (Exp	lain in Remarks)	
	d Below Dark Surfa	ace (A11)	Depleted							
	ark Surface (A12)		Redox Da		` '				ydrophytic vegetati	
	/lucky Mineral (S1)		Depleted		` '	)			drology must be pre	
	Mucky Peat or Pea		Redox De	pression	ıs (F8)			unless dist	urbed or problemat	ic.
	Layer (if observe	d):								
Type:	I \		_				11	- !! D 40	V	N. V
Depth (i	nches):		_				Hydric S	oil Present?	Yes	NoX
Remarks:										
HYDROLO	GY									
Wetland Hy	drology Indicator	s:								
Primary Indi	cators (minimum o	f one is required	d; check all that	apply)				Secondary Indi	cators (2 or more re	equired)
Surface	Water (A1)		Water-Sta	ined Lea	aves (B9)	(excep	t	Water-Stai	ned Leaves (B9) ( <b>N</b>	ILRA 1, 2
High Wa	ater Table (A2)		MLRA	1, 2, 4A	, and 4B	)		4A, and	I 4B)	
Saturation	on (A3)		Salt Crust	(B11)				Drainage F	atterns (B10)	
Water M	larks (B1)		Aquatic In	vertebra	tes (B13)	)		Dry-Seaso	n Water Table (C2)	
Sedime	nt Deposits (B2)		Hydrogen	Sulfide	Odor (C1	)		Saturation	Visible on Aerial Im	nagery (C9)
Drift Dep	posits (B3)		Oxidized I	Rhizosph	neres on	Living R	Roots (C3)	Geomorph	ic Position (D2)	
Algal Ma	at or Crust (B4)		Presence	of Redu	ced Iron (	(C4)		Shallow Ad	ıuitard (D3)	
Iron Dep	oosits (B5)		Recent Iro	n Reduc	ction in Ti	illed Soi	ls (C6)	X FAC-Neutr	al Test (D5)	
Surface	Soil Cracks (B6)		Stunted o	r Stresse	ed Plants	(D1) ( <b>L</b>	RR A)		Mounds (D6) (LRF	R A)
	on Visible on Aeria		Other (Ex	plain in F	Remarks)			Frost-Heav	e Hummocks (D7)	
Sparsely	y Vegetated Conca	ive Surface (B8	)							
Field Obser		.,		<b>5</b>						
Surface Wat		Yes	No X		nches): _					
Water Table		Yes	No X		nches): _			d Hadaalaaa Ba	40 V	N. V
Saturation P		Yes	No <u>X</u>	pepth (i	inches): _		wetlan	ia Hydrology Pre	esent? Yes	NoX
	pillary fringe)	am dallaa mani	toring wall caris	l nhataa	provious	o inono	tional if av	oilabla.		
Describe Re	corded Data (strea	ını yauye, moni	toring well, aeria	ai priotos	, previous	ь шѕрес	Juons), II av	aliabie.		
Remarks:										

# WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

Project/Site: Bremerton Airport		City/Cour	nty: Bremer	ton / Kitsap	Sampling Date:	10/23/23
Applicant/Owner: Port of Bremerton				State: WA	Sampling Point:	W5-SP1
Investigator(s): M Brownell and M Evinger		Section, T	ownship, Ra	ange: SEC 14, T23N, R	1W	
Landform (hillside, terrace, etc.): depression		 ∟ocal relief (co	oncave, conv	/ex, none): concave	Slop	e (%): 0-1%
Subregion (LRR): LRR A Lat: 47.4	178542		Long: -	122.774706	Datum:	NAD 83
Soil Map Unit Name: Alderwood gravelly sandy loan	n, 8 to 15 perce	nt slopes		NWI classit	fication: PSSC	
Are climatic / hydrologic conditions on the site typica	I for this time of	year?	Yes X	No (If no, exp	olain in Remarks.)	
Are Vegetation, Soil, or Hydrology		-	re "Normal (	Circumstances" present?	Yes X No	)
Are Vegetation , Soil , or Hydrology	<del></del>			κplain any answers in Re	<u> </u>	
SUMMARY OF FINDINGS – Attach site r						ures, etc.
Hydrophytic Vegetation Present? Yes X	No	Is the	Sampled A	Area		
	No		n a Wetland		No	
	No					
Remarks:		I				
<b>VEGETATION – Use scientific names of</b>	f plants.					
	Absolute	Dominant	Indicator			
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Dominance Test wor		
1 2.				Number of Dominant Are OBL, FACW, or F	•	3 (A)
3.				Total Number of Dom		<u> </u>
4.				Across All Strata:	•	3 (B)
		=Total Cover		Percent of Dominant	Species That	`` ′
Sapling/Shrub Stratum (Plot size: 15'	)			Are OBL, FACW, or F		0.0% (A/B
Spiraea douglasii	80	Yes	FACW			
2. Salix scouleriana	20	Yes	FAC	Prevalence Index wo		
3.				Total % Cover of		<del></del>
4				OBL species	x 1 = x 2 =	
5	100	=Total Cover		FACW species FAC species	x 2 =	
Herb Stratum (Plot size: 5' )		rotal corol		FACU species	x 4 =	
1. Carex obnupta	95	Yes	OBL	UPL species	x 5 =	
2. Equisetum telmateia	5	No	FACW	Column Totals:	(A)	(B)
3				Prevalence Index	= B/A =	
4						
5				Hydrophytic Vegetat		
6.				X 2 - Dominance Te	Hydrophytic Vegeta	ation
7. 8.				3 - Prevalence Inc		
					Adaptations <sup>1</sup> (Provid	le supporting
10					s or on a separate s	
11.				5 - Wetland Non-	Vascular Plants <sup>1</sup>	
	100	=Total Cover		Problematic Hydr	ophytic Vegetation <sup>1</sup>	(Explain)
Woody Vine Stratum (Plot size: 5'	)			<sup>1</sup> Indicators of hydric s	oil and wetland hydr	ology must
1				be present, unless dis		
2				Hydrophytic		
% Bare Ground in Herb Stratum0		=Total Cover		Vegetation Present? Yes	No	_
Remarks:						

SOIL Sampling Point: W5-SP1 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Loc<sup>2</sup> Color (moist) % Color (moist) Type<sup>1</sup> (inches) Texture 0-16 10YR 2/1 100 Loamy/Clayey <sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils<sup>3</sup>: 2 cm Muck (A10) (LRR A, E) Histosol (A1) Sandy Gleyed Matrix (S4) Histic Epipedon (A2) Sandy Redox (S5) Iron-Manganese Masses (F12) (LRR D) Black Histic (A3) Stripped Matrix (S6) Red Parent Material (F21) X Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (F22) 1 cm Muck (A9) (LRR D, G) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) <sup>3</sup>Indicators of hydrophytic vegetation and Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, 2.5 cm Mucky Peat or Peat (S2) (LRR G) Redox Depressions (F8) unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** Yes No Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (2 or more required) Surface Water (A1) Water-Stained Leaves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2 High Water Table (A2) MLRA 1, 2, 4A, and 4B) 4A, and 4B) X Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Oxidized Rhizospheres on Living Roots (C3) Geomorphic Position (D2) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) FAC-Neutral Test (D5) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Depth (inches): Yes

Water Table Present? Depth (inches): Saturation Present? Depth (inches): 3 Wetland Hydrology Present? Yes X No (includes capillary fringe)

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

Sample plot is approximately 5 feet from a seasonally ponded area with surface water present at time of site visit

# WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

Project/Site: Bremerton Airport		City/Cour	nty: Bremer	ton / Kitsap	Sampling Date:	10/23/23
Applicant/Owner: Port of Bremerton				State: WA	Sampling Point:	W5-SP2
Investigator(s): M. Brownell and M. Evinger		Section, T	ownship, Ra	ange: SEC 14, T23N, R	1W	
Landform (hillside, terrace, etc.): gradual slope		 Local relief (co	ncave, conv	vex, none): convex	Slop	e (%):2
Subregion (LRR): LRR A Lat: 47.4	178452		Long: -	122.774540	 Datum:	NAD83, NAVD88
Soil Map Unit Name: Alderwood gravelly sandy loan	n, 8 to 15 perce	nt slopes		NWI classit	fication: PSSC	
Are climatic / hydrologic conditions on the site typica	I for this time of	f year?	Yes X			
Are Vegetation, Soil, or Hydrology	significantly of			<del></del>	Yes X No	1
Are Vegetation , Soil , or Hydrology				ιplain any answers in Re	<del></del>	
SUMMARY OF FINDINGS – Attach site r	_				,	ures, etc.
Hydrophytic Vegetation Present? Yes	No X	Is the	Sampled A	.rea		
	No X	1	n a Wetland		No X	
Wetland Hydrology Present? Yes	No X					
Remarks:  VEGETATION – Use scientific names of	<sup>·</sup> plants.					
	Absolute	Dominant	Indicator			
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Dominance Test wor	rksheet:	
1. Abies procera		Yes Yes	FACU	Number of Dominant	•	3 (A)
Frangula purshiana 3.		Yes	FAC	Are OBL, FACW, or F	<del></del>	3 (A)
4.				Total Number of Dom Across All Strata:	•	6 (B)
	50	=Total Cover		Percent of Dominant	——— Species That	. ,
Sapling/Shrub Stratum (Plot size: 15'	)			Are OBL, FACW, or F	•	.0% (A/B
Spiraea douglasii	75	Yes	FACW			
2. Rubus spectabilis	30	Yes	FAC	Prevalence Index wo	orksheet:	
3. Rubus armeniacus	10	No	<u>FAC</u>	Total % Cover of		
4.				OBL species	x 1 =	
5	115	=Total Cover		FACW species FAC species	x 2 = x 3 =	
Herb Stratum (Plot size: 5' )		- Total Cover		FACU species	x 4 =	
1. Pteridium aquilinum	5	Yes	FACU	UPL species	x 5 =	
2. Rubus laciniatus	10	Yes	FACU	Column Totals:	(A)	(B)
3.				Prevalence Index	= B/A =	
4						
5				Hydrophytic Vegetat		
6.				l — ·	Hydrophytic Vegeta	ation
7. 8.				2 - Dominance Te 3 - Prevalence Inc		
					Adaptations¹(Provid	le sunnortino
10					s or on a separate s	
11.				5 - Wetland Non-		,
	15	=Total Cover		Problematic Hydr	ophytic Vegetation <sup>1</sup>	(Explain)
Woody Vine Stratum (Plot size: 5'	)			<sup>1</sup> Indicators of hydric s	oil and wetland hydr	ology must
1				be present, unless dis	turbed or problemat	ic.
2		<del></del>		Hydrophytic		
% Bare Ground in Herb Stratum85		=Total Cover		Vegetation Present? Yes	No _X_	_
Remarks:						

SOIL Sampling Point: W5-SP2 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Loc<sup>2</sup> Color (moist) % Color (moist) Remarks (inches) Type<sup>1</sup> Texture 8-0 10YR 2/2 100 Loamy/Clayey 10YR 4/3 7.5YR 4/6 Prominent redox concentrations 8-16 99 С Loamy/Clayey М <sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils<sup>3</sup>: 2 cm Muck (A10) (LRR A, E) Histosol (A1) Sandy Gleyed Matrix (S4) Histic Epipedon (A2) Sandy Redox (S5) Iron-Manganese Masses (F12) (LRR D) Black Histic (A3) Stripped Matrix (S6) Red Parent Material (F21) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (F22) 1 cm Muck (A9) (LRR D, G) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) <sup>3</sup>Indicators of hydrophytic vegetation and Thick Dark Surface (A12) Redox Dark Surface (F6) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) wetland hydrology must be present, 2.5 cm Mucky Peat or Peat (S2) (LRR G) Redox Depressions (F8) unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** Yes No Χ Remarks: **HYDROLOGY** 

Wetland Hydrology Indica	ors:								
Primary Indicators (minimum	n of one is requ	red; check all the	at apply)		Secondary Indicators (2 or more required)				
Surface Water (A1)		Water-S	Stained Leaves (B9) ( <b>exce</b>	pt	Water-Stained Leaves (B9) (MLRA 1, 2				
High Water Table (A2)		MLF	RA 1, 2, 4A, and 4B)		4A, and 4B)				
Saturation (A3)		Salt Cru	ıst (B11)		Drainage Patterns (B10)				
Water Marks (B1)		Aquatic	Invertebrates (B13)		Dry-Season Water Table (C2)				
Sediment Deposits (B2)		—— Hydrog	en Sulfide Odor (C1)		Saturation Visible on Aerial Imagery (C9)				
Drift Deposits (B3)		Oxidize	d Rhizospheres on Living	Roots (C3)	Geomorphic Position (D2)				
Algal Mat or Crust (B4)		Presend	ce of Reduced Iron (C4)		Shallow Aquitard (D3)				
Iron Deposits (B5)		Recent	Iron Reduction in Tilled Sc	oils (C6)	FAC-Neutral Test (D5)				
Surface Soil Cracks (B6	)	Stunted	or Stressed Plants (D1) (I	LRR A)	Raised Ant Mounds (D6) (LRR A)				
Inundation Visible on Ae	erial Imagery (B	7) Other (I	Explain in Remarks)		Frost-Heave Hummocks (D7)				
Sparsely Vegetated Cor	ncave Surface (	B8)							
Field Observations:									
Surface Water Present?	Yes	No X	Depth (inches):	_					
Water Table Present?	Yes	No X	Depth (inches):						
Saturation Present?	Yes	No X	Depth (inches):	Wetlan	d Hydrology Present? Yes No _X_				
(includes capillary fringe)									
Describe Recorded Data (st	ream gauge, m	onitoring well, ae	rial photos, previous inspe	ections), if av	ailable:				
Remarks:									
NG FORM 6116-9, JUL 201	8			٧	Vestern Mountains, Valleys, and Coast – Version 2.				
•					• • •				

# WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

Project/Site: Bremerton Airport		City/Cour	nty: Bremerto	on / Kitsap	Saı	mpling Date:	10/23/23
Applicant/Owner: Port of Bremerton				State:	WA Sar	mpling Point:	W5-SP3
Investigator(s): M. Brownell and M. Evinger		Section, T	ownship, Ran	ige: SEC 14, T	23N, R1W		
Landform (hillside, terrace, etc.): gradual slope	L		ncave, conve	x, none): con	vex	Slo	pe (%): 2
Subregion (LRR): LRR A Lat: 47.4784	52		Long: -12	22.774540		 Datum:	NAD83, NAVD88
Soil Map Unit Name: Alderwood gravelly sandy loam, 8 t	to 15 percer	nt slopes			'I classificatio	<del></del> '	
Are climatic / hydrologic conditions on the site typical for	this time of	year?	Yes X	No (If			
Are Vegetation, Soil, or Hydrologysiq		-	.re "Normal Ci	ircumstances" p	resent? Ye	es X N	lo
Are Vegetation , Soil , or Hydrology na							
SUMMARY OF FINDINGS – Attach site map							tures, etc
Hydrophytic Vegetation Present? Yes No	X	Is the	Sampled Ar	ea			
	X		n a Wetland?		s N	lo X	
Wetland Hydrology Present? Yes No	X						
Remarks:		-					
VEGETATION – Use scientific names of pla	ante						
	Absolute	Dominant	Indicator				
	% Cover	Species?	Status	Dominance T	est workshe	et:	
1. Abies procera	40	Yes	FACU	Number of Do	minant Speci	es That	
2. Frangula purshiana	10	Yes	FAC_	Are OBL, FAC	W, or FAC:		3 (A)
3				Total Number		Species	6 (D)
4	50 =	Total Cover		Across All Stra			6 (B)
- Sapling/Shrub Stratum (Plot size: 15' )		Total Gover		Percent of Dor Are OBL, FAC			50.0% (A/E
1. Spiraea douglasii	75	Yes	FACW	, -	, -		
2. Rubus spectabilis	30	Yes	FAC	Prevalence In	dex worksh	eet:	
3. Rubus armeniacus	10	No	FAC	Total % C	Cover of:	Multipl	y by:
4				OBL species		x 1 =	
5				FACW species	<u> </u>	_ x 2 =	
- Herb Stratum (Plot size: 5' )	<u> 115</u> =	Total Cover		FACULARIANIA		x 3 =	
Herb Stratum (Plot size: 5' )  1. Pteridium aquilinum	5	Yes	FACU	FACU species UPL species	·	x 4 = x 5 =	
2. Rubus laciniatus	10	Yes	FACU	Column Totals	 s:	(A) —	(B)
3.					Index = B/A		
4.							
5				Hydrophytic \	Vegetation Ir	ndicators:	
6					Test for Hydro		tation
7					ance Test is		
8					ence Index is		
9					ological Adap	•	• • •
10					Remarks or o		sileet)
11	 15 =	Total Cover			tic Hydrophyti		ı <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size: 5' )		. 5.61 55761		<sup>1</sup> Indicators of I		_	
1				be present, un			
2.				Hydrophytic			
	=	Total Cover		Vegetation Present?	Yes	No X	
Remarks:							

SOIL Sampling Point: W5-SP3 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Loc<sup>2</sup> % Color (moist) Color (moist) Type<sup>1</sup> (inches) Texture Remarks 8-0 10YR 2/2 100 Loamy/Clayey 8-16 10YR 4/3 99 7.5YR 4/6 С Loamy/Clayey Prominent redox concentrations М <sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils<sup>3</sup>: Histosol (A1) Sandy Gleyed Matrix (S4) 2 cm Muck (A10) (LRR A, E) Histic Epipedon (A2) Sandy Redox (S5) Iron-Manganese Masses (F12) (LRR D) Black Histic (A3) Stripped Matrix (S6) Red Parent Material (F21) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (F22) 1 cm Muck (A9) (LRR D, G) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) <sup>3</sup>Indicators of hydrophytic vegetation and Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, 2.5 cm Mucky Peat or Peat (S2) (LRR G) Redox Depressions (F8) unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** Yes No Х Remarks: **HYDROLOGY** 

Wetland Hydrology Indicators:					
Primary Indicators (minimum of one is required	d; check all that apply)	Secondary Indicators (2 or more required)			
Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2			
High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)			
Saturation (A3)	Salt Crust (B11)	Drainage Patterns (B10)			
Water Marks (B1)	Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)			
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)			
Drift Deposits (B3)	Oxidized Rhizospheres on Living Roo	ots (C3) Geomorphic Position (D2)			
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Shallow Aquitard (D3)			
Iron Deposits (B5)	Recent Iron Reduction in Tilled Soils	(C6) FAC-Neutral Test (D5)			
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (LRI	R A) Raised Ant Mounds (D6) (LRR A)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Frost-Heave Hummocks (D7)			
Sparsely Vegetated Concave Surface (B8		<del>_</del>			
Field Observations:					
Surface Water Present? Yes	No X Depth (inches):				
Water Table Present? Yes	No X Depth (inches):				
Saturation Present? Yes	No X Depth (inches):	Wetland Hydrology Present? Yes No _X			
(includes capillary fringe)					

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

Remarks:

# WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

Project/Site: Bremerton Airport		City/Cour	nty: Bremerto	on / Kitsap	Sa	ampling Date:	10/23/23
Applicant/Owner: Port of Bremerton				State:	WA Sa	ampling Point:	W5-SP3-1
Investigator(s): M. Brownell and M. Evinger		Section, T	ownship, Rar	nge: Sec 14, T	23N, R01W		
Landform (hillside, terrace, etc.): top of gradual slope	L	 .ocal relief (co	ncave, conve	ex, none): nor	ne	Slo	pe (%): 1
Subregion (LRR): LRR A Lat: 47.4785	22		Long: -1	22.774643		 Datum:	NAD83
Soil Map Unit Name: Alderwood gravelly sandy loam, 8 t	to 15 perce	nt slopes		NW	VI classificati	on: PSSC	-
Are climatic / hydrologic conditions on the site typical for		•	Yes X	No (I			
Are Vegetation, Soil, or Hydrologysig		-			•	,	О
Are Vegetation , Soil , or Hydrology na				lain any answe			
SUMMARY OF FINDINGS – Attach site map			·	•		•	tures, etc.
Hydrophytic Vegetation Present? Yes X No		Is the	Sampled Ar	ea			
		l l	n a Wetland?		s_X_	No	
Wetland Hydrology Present? Yes X No							
Remarks:							
VEGETATION – Use scientific names of pla	ants.						
	Absolute	Dominant	Indicator				
`	% Cover	Species?	Status	Dominance T			
1. Alnus rubra 2.	30	Yes	FAC	Number of Do Are OBL, FAC			5 (A)
3.				Total Number			(')
4.				Across All Str			5 (B)
<u>-</u>	30 =	Total Cover		Percent of Do	minant Spec	ies That	
Sapling/Shrub Stratum (Plot size: 15' )				Are OBL, FAC	CW, or FAC:	10	00.0% (A/B
Rhododendron groenlandicum	20	No No	OBL	D		<u> </u>	
Salix scouleriana     Spiraea douglasii	60	Yes Yes	FACW	Prevalence In Total % (		neet: Multiply	v bv:
4. Rubus spectabilis	5	No	FAC	OBL species		x 1 =	y by.
5. Rubus laciniatus	3	No	FACU	FACW specie			
	128 =	Total Cover		FAC species		x 3 =	
Herb Stratum (Plot size: 5' )				FACU species	s		
1. Carex obnupta	80	Yes	OBL	UPL species		_ x 5 =	
2. Phalaris arundinacea	20	Yes	<u>FACW</u>	Column Totals		(A)	(B)
3				Prevalence	₃ Index = B/	A =	
4				Hydrophytic	Vocatation	Indicators	
-					_	indicators. Irophytic Veget	tation
7.				X 2 - Domin	-		idion.
8.					lence Index i		
9.				4 - Morph	ological Ada	ptations¹(Provi	ide supporting
10				data in	Remarks or	on a separate	sheet)
11				5 - Wetlar	nd Non-Vasc	cular Plants <sup>1</sup>	
<u>-</u>	100 =	Total Cover		Problema	tic Hydrophy	tic Vegetation	<sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:5')						nd wetland hyd	
1				be present, ur	nless disturb	ed or problema	atic.
2		-Total Cava		Hydrophytic			
% Bare Ground in Herb Stratum0	=	=Total Cover		Vegetation Present?	Yes X	No	_
Remarks:			<u> </u>				

SOIL Sampling Point: W5-SP3-fe

	Matrix		Redox	k Featur	es				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Text	ure	Remarks
0-7	10YR 2/2	95	7.5YR 4/6	5	_ C	M_	Loamy/	Clayey	Prominent redox concentrations
7-16	10YR 2/1	99	10YR 5/8	1	С	M	Loamy/	Clayey	Prominent redox concentrations
¹Type: C=Co	ncentration, D=Depletio	 n, RM=	Reduced Matrix, C	S=Cove	ered or C	oated S	Sand Grains.	<sup>2</sup> Loca	tion: PL=Pore Lining, M=Matrix.
Hydric Soil Ir	ndicators: (Applicable	to all L	RRs, unless othe	rwise n	oted.)			Indicator	s for Problematic Hydric Soils <sup>3</sup> :
Histosol (	A1)		Sandy Gle	yed Mat	rix (S4)			2 cm	Muck (A10) <b>(LRR A, E)</b>
Histic Epi	pedon (A2)		Sandy Red	lox (S5)				Iron-N	Manganese Masses (F12) (LRR D)
Black His	tic (A3)		Stripped M	atrix (Se	3)			Red F	Parent Material (F21)
—— Hydrogen	n Sulfide (A4)		Loamy Mu	cky Mine	eral (F1)	(excep	t MLRA 1)	Very	Shallow Dark Surface (F22)
1 cm Muc	ck (A9) (LRR D, G)		Loamy Gle	yed Mat	trix (F2)			Other	(Explain in Remarks)
	Below Dark Surface (A	11)	Depleted N	-					,
	rk Surface (A12)	,	X Redox Dar	-				3Indicators	s of hydrophytic vegetation and
	ucky Mineral (S1)		Depleted D			)			nd hydrology must be present,
	ucky Peat or Peat (S2) (	(LRR G			, ,				s disturbed or problematic.
	ayer (if observed):								
Type: _									
Depth (inc	ches):						Hydric Sc	il Present	? Yes <u>X</u> No
1)/DDQLQ									
HYDROLOG									
Wetland Hyd	rology Indicators:	s require	ed check all that a	upply)				Secondar	v Indicators (2 or more required)
Wetland Hyd Primary Indica	rology Indicators: ators (minimum of one is	s require			wes (R0)	/excen	<u>.</u>		y Indicators (2 or more required)
Wetland Hyd Primary Indica Surface V	rology Indicators: ators (minimum of one is Vater (A1)	s require	Water-Stai	ned Lea	. ,		ot	Water	r-Stained Leaves (B9) (MLRA 1, 2
Wetland Hyd Primary Indica Surface V High Wate	rology Indicators: ators (minimum of one is Vater (A1) er Table (A2)	s require	Water-Stai	ned Lea 1, 2, 4A,	ves (B9)		ot	Water	r-Stained Leaves (B9) (MLRA 1, 2 a, and 4B)
Wetland Hyd Primary Indica Surface V High Wate X Saturation	rology Indicators: ators (minimum of one is Vater (A1) er Table (A2) n (A3)	s require	Water-Stai MLRA Salt Crust	ned Lea <b>1, 2, 4A</b> , (B11)	and 4B	)	ot .	Water  4A  Drain	r-Stained Leaves (B9) (MLRA 1, 2 a, and 4B) age Patterns (B10)
Wetland Hyd Primary Indica Surface V High Wate X Saturation Water Ma	rology Indicators: ators (minimum of one is Vater (A1) er Table (A2) n (A3) arks (B1)	s require	Water-Stai MLRA Salt Crust Aquatic Inv	ned Lea 1, 2, 4A, (B11) vertebra	and 4B)	)	ot	Water  4A  Drain: Dry-S	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) eason Water Table (C2)
Wetland Hyd Primary Indica Surface V High Wate X Saturation Water Ma Sediment	rology Indicators: ators (minimum of one is Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2)	s require	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen	ned Lea 1, 2, 4A, (B11) vertebrate Sulfide (	and 4B) tes (B13) Odor (C1	)		Water 4A Draina Dry-S Satura	r-Stained Leaves (B9) (MLRA 1, 2 a, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9)
Wetland Hyd Primary Indica Surface V High Wate X Saturation Water Ma Sediment Drift Depo	rology Indicators: ators (minimum of one is Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3)	s require	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  Oxidized F	ned Lea  1, 2, 4A,  (B11)  vertebrat  Sulfide (	tes (B13) Odor (C1 eres on l	) ) Living R		Water  4A  Drain: Dry-S  Satur: Geom	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) leason Water Table (C2) ation Visible on Aerial Imagery (C9) horphic Position (D2)
Wetland Hyd Primary Indica Surface V High Wate X Saturation Water Ma Sediment Drift Depo	rology Indicators: ators (minimum of one is Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) posits (B3) or Crust (B4)	s require	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  Oxidized R  Presence of	ned Lea  1, 2, 4A,  (B11)  vertebrat  Sulfide (  thizosph  of Reduce	tes (B13) Odor (C1 eres on l	) ) Living R (C4)	Roots (C3)	Water 4A Drain Dry-S Satur Geom	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) leason Water Table (C2) lation Visible on Aerial Imagery (C9) horphic Position (D2) low Aquitard (D3)
Wetland Hyd Primary Indica Surface V High Wate X Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo	rology Indicators: ators (minimum of one is Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) posits (B3) or Crust (B4) posits (B5)	s require	Water-Stai  MLRA Salt Crust Aquatic Inv Hydrogen Oxidized R Presence o	ned Lea  1, 2, 4A, (B11) vertebrat Sulfide ( thizosph of Reduc	tes (B13) Odor (C1 eres on loced Iron (ction in Ti	) Living R (C4) Iled Soi	Roots (C3)	Water  4A  Drain.  Dry-S  Satur.  Geom  Shalld  X FAC-	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) leason Water Table (C2) ation Visible on Aerial Imagery (C9) horphic Position (D2) low Aquitard (D3) Neutral Test (D5)
Wetland Hyd Primary Indica Surface V High Wate X Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S	rology Indicators: ators (minimum of one is Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) posits (B3) or Crust (B4) posits (B5) Goil Cracks (B6)		Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  Oxidized F  Presence of  Recent Iro  Stunted or	ned Lea 1, 2, 4A, (B11) vertebrai Sulfide ( thizosph of Reduct n Reduct Stresse	tes (B13) Odor (C1 teres on led Iron (ction in Ti	) Living R (C4) Iled Soi (D1) ( <b>L</b>	Roots (C3)	Water  4A Drain Dry-S Satur Geom Shalk X FAC-I Raise	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) norphic Position (D2) bw Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A)
Wetland Hyd Primary Indica Surface V High Wate X Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation	rology Indicators: ators (minimum of one is Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) posits (B3) or Crust (B4) posits (B5)	ery (B7	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  Oxidized F  Presence of Recent Iro  Stunted or  Other (Exp	ned Lea 1, 2, 4A, (B11) vertebrai Sulfide ( thizosph of Reduct n Reduct Stresse	tes (B13) Odor (C1 teres on led Iron (ction in Ti	) Living R (C4) Iled Soi (D1) ( <b>L</b>	Roots (C3)	Water  4A Drain Dry-S Satur Geom Shalk X FAC-I Raise	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) leason Water Table (C2) ation Visible on Aerial Imagery (C9) horphic Position (D2) low Aquitard (D3) Neutral Test (D5)
Wetland Hyd Primary Indica Surface V High Wate X Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation	rology Indicators: ators (minimum of one is Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) posits (B3) c or Crust (B4) posits (B5) Soil Cracks (B6) n Visible on Aerial Imag Vegetated Concave Sur	ery (B7	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  Oxidized F  Presence of Recent Iro  Stunted or  Other (Exp	ned Lea 1, 2, 4A, (B11) vertebrai Sulfide ( thizosph of Reduct n Reduct Stresse	tes (B13) Odor (C1 teres on led Iron (ction in Ti	) Living R (C4) Iled Soi (D1) ( <b>L</b>	Roots (C3)	Water  4A Drain Dry-S Satur Geom Shalk X FAC-I Raise	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) norphic Position (D2) bw Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A)
Wetland Hyd Primary Indica Surface V High Water X Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely	rology Indicators: ators (minimum of one is Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) posits (B3) or Crust (B4) posits (B5) Soil Cracks (B6) n Visible on Aerial Imag Vegetated Concave Sur	ery (B7 face (B	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  Oxidized R  Presence of Recent Iro  Stunted or  Other (Exp	ned Lea 1, 2, 4A, (B11) vertebrat Sulfide ( chizosph of Reduc n Reduc Stresse dain in F	tes (B13) Odor (C1 teres on led Iron (ction in Ti	Living R (C4) Iled Soi (D1) ( <b>L</b>	Roots (C3)	Water  4A Drain Dry-S Satur Geom Shalk X FAC-I Raise	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) norphic Position (D2) bw Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A)
Wetland Hyd Primary Indica Surface V High Water X Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely	rology Indicators: ators (minimum of one is Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial Imag Vegetated Concave Sur rations: er Present? Yes Present? Yes	ery (B7 face (B	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  Oxidized F  Presence of Recent Iro  Stunted or  Other (Exp	ned Lea 1, 2, 4A, (B11) vertebrat Sulfide ( thizosph of Reduc n Reduc Stresse lain in F	and 4B, tes (B13) Odor (C1 teres on leded Iron ( tition in Ti d Plants Remarks)	Living R (C4) Iled Soi (D1) ( <b>L</b>	Roots (C3)	Water  4A Drain Dry-S Satur Geom Shalk X FAC-I Raise	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) norphic Position (D2) bw Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A)
Wetland Hyd Primary Indica Surface V High Wate X Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely Field Observ Surface Water Water Table F	rology Indicators: ators (minimum of one is Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) posits (B3) t or Crust (B4) posits (B5) Soil Cracks (B6) n Visible on Aerial Imag Vegetated Concave Sur rations: ar Present? Yes Present? Yes	ery (B7 face (B	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  Oxidized F  Presence of Recent Iro  Stunted or  Other (Exp  No X  No X	ned Lea 1, 2, 4A, (B11) vertebrar Sulfide ( thizosph of Reduc n Reduc Stresse slain in F	and 4B; tes (B13) Odor (C1 teres on led Iron (tition in Tition in Tition Iron (tition in Tition Iron (tition in Tition Iron Iron Iron Iron Iron Iron Iron Ir	Living F (C4) (Iled Soi (D1) ( <b>L</b>	Roots (C3)	Water  4A  Drain  Dry-S  Satur  Geom  Shallc  X FAC-I  Raise  Frost-	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) norphic Position (D2) bw Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A)
Wetland Hyd Primary Indica Surface V High Wate X Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely Field Observ Surface Wate	rology Indicators: ators (minimum of one is Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) posits (B3) t or Crust (B4) posits (B5) Soil Cracks (B6) n Visible on Aerial Imag Vegetated Concave Sur ations: ar Present? Present? Yes esent? Yes	ery (B7 face (B	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  Oxidized F  Presence of Recent Iro  Stunted or  Other (Exp  No X  No X	ned Lea 1, 2, 4A, (B11) vertebrar Sulfide ( thizosph of Reduc n Reduc Stresse slain in F	tes (B13) Ddor (C1 teres on led Iron (tition in Tid Plants Remarks)  nches):	Living F (C4) (Iled Soi (D1) ( <b>L</b>	Roots (C3)	Water  4A  Drain  Dry-S  Satur  Geom  Shallc  X FAC-I  Raise  Frost-	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) norphic Position (D2) bw Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A) Heave Hummocks (D7)
Wetland Hyd Primary Indica Surface V High Water X Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely Field Observ Surface Water Water Table F Saturation Pre (includes capi	rology Indicators: ators (minimum of one is Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) posits (B3) t or Crust (B4) posits (B5) Soil Cracks (B6) n Visible on Aerial Imag Vegetated Concave Sur ations: ar Present? Present? Yes esent? Yes	ery (B7 face (B	Water-Stai  MLRA Salt Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iro Stunted or Other (Exp 8)  No X No X No X	ned Lea 1, 2, 4A, (B11) vertebrai Sulfide ( thizosph of Reduce n Reduce Stresse slain in F	and 4B; tes (B13) Ddor (C1 teres on led tron (ced Iron (	) Living R (C4) Illed Soi (D1) (L	Roots (C3)  Ils (C6)  RR A)  Wetland	Water  4A  Drain.  Dry-S  Satur.  Geom  Shalld  X FAC-  Raise  Frost-	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) norphic Position (D2) bw Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A) Heave Hummocks (D7)
Wetland Hyd Primary Indica Surface V High Water X Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely Field Observ Surface Water Water Table F Saturation Pre (includes capi	rology Indicators: ators (minimum of one is Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) posits (B3) t or Crust (B4) posits (B5) Soil Cracks (B6) n Visible on Aerial Imag Vegetated Concave Sur rations: ar Present? Yes pesent? Yes lillary fringe)	ery (B7 face (B	Water-Stai  MLRA Salt Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iro Stunted or Other (Exp 8)  No X No X No X	ned Lea 1, 2, 4A, (B11) vertebrai Sulfide ( thizosph of Reduce n Reduce Stresse slain in F	and 4B; tes (B13) Ddor (C1 teres on led tron (ced Iron (	) Living R (C4) Illed Soi (D1) (L	Roots (C3)  Ils (C6)  RR A)  Wetland	Water  4A  Drain.  Dry-S  Satur.  Geom  Shalld  X FAC-  Raise  Frost-	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) norphic Position (D2) ow Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A) Heave Hummocks (D7)
Wetland Hyd Primary Indica Surface V High Wate X Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely Field Observ Surface Wate Water Table F Saturation Pre (includes capi Describe Reco	rology Indicators: ators (minimum of one is Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) posits (B3) t or Crust (B4) posits (B5) Soil Cracks (B6) n Visible on Aerial Imag Vegetated Concave Sur rations: ar Present? Yes pesent? Yes lillary fringe)	ery (B7 face (B	Water-Stai  MLRA Salt Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iro Stunted or Other (Exp 8)  No X No X No X	ned Lea 1, 2, 4A, (B11) vertebrai Sulfide ( thizosph of Reduce n Reduce Stresse slain in F	and 4B; tes (B13) Ddor (C1 teres on led tron (ced Iron (	) Living R (C4) Illed Soi (D1) (L	Roots (C3)  Ils (C6)  RR A)  Wetland	Water  4A  Drain.  Dry-S  Satur.  Geom  Shalld  X FAC-  Raise  Frost-	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) norphic Position (D2) ow Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A) -Heave Hummocks (D7)
Wetland Hyd Primary Indica Surface V High Wate X Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely Field Observ Surface Wate Water Table F Saturation Pre (includes capi Describe Reco	rology Indicators: ators (minimum of one is Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) posits (B3) t or Crust (B4) posits (B5) Soil Cracks (B6) n Visible on Aerial Imag Vegetated Concave Sur rations: ar Present? Yes pesent? Yes lillary fringe)	ery (B7 face (B	Water-Stai  MLRA Salt Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iro Stunted or Other (Exp 8)  No X No X No X	ned Lea 1, 2, 4A, (B11) vertebrai Sulfide ( thizosph of Reduce n Reduce Stresse slain in F	and 4B; tes (B13) Ddor (C1 teres on led tron (ced Iron (	) Living R (C4) Illed Soi (D1) (L	Roots (C3)  Ils (C6)  RR A)  Wetland	Water  4A  Drain.  Dry-S  Satur.  Geom  Shalld  X FAC-  Raise  Frost-	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) norphic Position (D2) ow Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A) Heave Hummocks (D7)

### WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

·	<u> </u>	<u> </u>			
Project/Site: Bremerton Airport		City/Cour	nty: Bremer	ton / Kitsap	Sampling Date: 10/23/23
Applicant/Owner: Port of Bremerton				State: WA	Sampling Point: W6-SP1
Investigator(s): M. Brownell and M. Evinger		Section, T	ownship, Ra	ange: Sec 14, T23N, R0	1W
Landform (hillside, terrace, etc.): depression		Local relief (co	ncave, con	/ex, none): concave	Slope (%):1
Subregion (LRR): LRR A Lat: 47.4	479627		Long:	122.765292	Datum: NAD83
Soil Map Unit Name: Shalcar muck				NWI classif	ication: PSSC
Are climatic / hydrologic conditions on the site typica	I for this time of	f year?	Yes X	No (If no, exp	lain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly	disturbed? A	re "Normal	Circumstances" present?	Yes X No
Are Vegetation , Soil , or Hydrology	naturally prol	blematic? (	If needed, ex	κplain any answers in Rer	marks.)
SUMMARY OF FINDINGS – Attach site	— map showin	g samplin	g point lo	cations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes X	No	Is the	Sampled A	Area	
	No	1	n a Wetland		No
	No				
Remarks:					
VEGETATION – Use scientific names of		Danimant	la di a tan	T	
Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test wor	ksheet:
1.				Number of Dominant S	Species That
2.				Are OBL, FACW, or Fa	•
3.				Total Number of Domi	•
4		=Total Cover		Across All Strata:	1 (B)
Sapling/Shrub Stratum (Plot size: 15'	,——	- rotal Cover		Percent of Dominant S Are OBL, FACW, or FA	•
1. Spiraea douglasii	′ 100	Yes	FACW	7,10 002,17,000,0117	100.070 (70D)
2				Prevalence Index wo	rksheet:
3.				Total % Cover of:	
4.		-		OBL species	x 1 =
5	100	=Total Cover		FACW species FAC species	x 2 = x 3 =
Herb Stratum (Plot size: 5' )		- Total Covel		FACU species	x 3 =
1				UPL species	x 5 =
2.				Column Totals:	(A) (B)
3				Prevalence Index :	= B/A =
4.				Unidua abiatia Manatat	ion Indicatons
56.				Hydrophytic Vegetat  1 - Rapid Test for	Hydrophytic Vegetation
7.				X 2 - Dominance Te	
8.				3 - Prevalence Inc	
9.				4 - Morphological	Adaptations¹(Provide supporting
10	_			data in Remark	s or on a separate sheet)
11				5 - Wetland Non-\	
Woody Vino Stratum (Dist size)		=Total Cover		l <del>-</del>	ophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size: 5'				<sup>1</sup> Indicators of hydric so be present, unless dis	oil and wetland hydrology must
1				·	iurbed or problematic.
		=Total Cover		Hydrophytic Vegetation	
% Bare Ground in Herb Stratum100					No
Remarks:				•	
No live trees but standing dead snags approximate	ly 10 feet from	soil pit			

SOIL Sampling Point: W6-SP1

Profile Desc Depth	ription: (Describe Matrix	to the dept		ment the Feature		itor or o	confirm the a	absence of	indicators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Textu	ıre	Rema	rks
0-9	10YR 2/1	100	<u> </u>		. )   0		Muc			
9-16	7.5YR 3/2	90	2.5Y 4/3	10			Mucky Loa		Distinct redox co	oncentrations
3-10	7.511(3/2		2.51 4/5			IVI	WILLOW LOS	arri/Clay	Distillet redox et	JICEI III ALIONS
			_							
<sup>1</sup> Type: C=Co	oncentration, D=Dep	letion, RM=	Reduced Matrix, C	S=Cove	ered or C	oated S	Sand Grains.	<sup>2</sup> Locat	ion: PL=Pore Lining	ı, M=Matrix.
Hydric Soil I	Indicators: (Applica	ble to all L	RRs, unless othe	rwise n	oted.)			Indicators	for Problematic H	ydric Soils³:
Histosol	(A1)		Sandy Gle	yed Mat	rix (S4)			2 cm N	Muck (A10) (LRR A,	E)
X Histic Ep	ipedon (A2)		Sandy Red	lox (S5)				Iron-M	langanese Masses (	F12) <b>(LRR D)</b>
X Black His	stic (A3)		Stripped M	atrix (S6	3)			Red P	arent Material (F21)	
Hydroge	n Sulfide (A4)		Loamy Mu	cky Mine	eral (F1)	(except	t MLRA 1)		Shallow Dark Surface	, ,
1 cm Mu	ck (A9) (LRR D, G)		Loamy Gle	yed Mat	trix (F2)			Other	(Explain in Remarks	.)
Depleted	Below Dark Surface	e (A11)	Depleted N	1atrix (F	3)					
	rk Surface (A12)		Redox Dar					<sup>3</sup> Indicators	of hydrophytic vege	tation and
´	lucky Mineral (S1)		Depleted D		, ,	)			d hydrology must be	
2.5 cm N	lucky Peat or Peat (	S2) (LRR G	Redox Dep	ression	s (F8)			unless	disturbed or probler	matic.
	_ayer (if observed):									
Type: _										v
Depth (ir	nches):						Hydric So	il Present?	Yes _	<u> </u>
Remarks:										
3 inches of d	uff above soil profile									
HYDROLO	GY									
Wetland Hyd	drology Indicators:									
Primary Indic	ators (minimum of o	ne is requir	ed; check all that a	pply)				Secondary	Indicators (2 or mo	re required)
Surface	Water (A1)		Water-Stai	ned Lea	ives (B9)	(excep	ot	Water-	-Stained Leaves (B9	) (MLRA 1, 2
X High Wa	ter Table (A2)		MLRA '	I, 2, 4A,	and 4B	)		4A,	, and 4B)	
Saturation	on (A3)		Salt Crust	(B11)				Draina	ige Patterns (B10)	
Water M	arks (B1)		Aquatic Inv	ertebrat	tes (B13)				eason Water Table (	•
	t Deposits (B2)		Hydrogen						ition Visible on Aeria	
	osits (B3)		Oxidized R			_	Roots (C3)		orphic Position (D2)	
`	t or Crust (B4)		Presence of			,			w Aquitard (D3)	
	osits (B5)		Recent Iron						Neutral Test (D5)	
	Soil Cracks (B6)		Stunted or			. , .	RR A)		d Ant Mounds (D6) (	•
	on Visible on Aerial I		· —	iain in R	(emarks			— Frost-I	Heave Hummocks ([	37)
<u> </u>	Vegetated Concave	Surface (B	58)				1			
Field Observ			No. V	Donth /	nahe=\·					
Surface Water				Depth (i	· -	10				
Water Table Saturation Pr				Depth (i		10 6	Motlond	l Hydrolog	v Drocont? Voc	Y No
(includes cap		s_X_	No	ehru (ו	nches): _	0	vvetiand	nyarology	y Present? Yes _	<u> </u>
	corded Data (stream	dalide mo	nitoring well serial	photos	nrevious	s insner	tions) if avai	ilable:		
Dooding Net	co. aca Data (stream	gaage, mo	omig won, acriai	priotos,	, provious	, moper	sasno <sub>j</sub> , n ava	iidbio.		
Remarks:										

### WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

Project/Site: Bremerton Airport		City/Cou	nty: Bremert	ton / Kitsap	Sampling Date:	10/23/23
Applicant/Owner: Port of Bremerton				State: WA	Sampling Point:	: W6-SP2
Investigator(s): M. Brownell and M. Evinger		Section, T	ownship, Ra	nge: Sec 13, T23N, R	)1W	
Landform (hillside, terrace, etc.): toe of slope		Local relief (co	oncave, conv	ex, none): none	Slo	ope (%):0
Subregion (LRR): LRR A Lat: 47.47	9593		Long: -1	22.765253	 Datum:	: NAD83
Soil Map Unit Name: Shalcar muck				NWI classi	fication: PSSC	
Are climatic / hydrologic conditions on the site typical	or this time of	f year?	Yes X	No (If no, ex	plain in Remarks.)	
Are Vegetation , Soil , or Hydrology	significantly	disturbed? A	Are "Normal C	 Circumstances" present?	Yes X	No
Are Vegetation , Soil , or Hydrology	<u>-</u> '			plain any answers in Re		
SUMMARY OF FINDINGS – Attach site m	•		g point lo	cations, transects	, important fea	atures, etc.
	lo X	Is the	e Sampled A	rea		
	lo X	withi	n a Wetland	? Yes	No X	
Wetland Hydrology Present? Yes N	lo <u>X</u>					
Remarks:  VEGETATION – Use scientific names of	olants.					
	Absolute	Dominant	Indicator			
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Dominance Test wo		
Pseudotsuga menziesii 2.		Yes	FACU_	Number of Dominant Are OBL, FACW, or F	•	1 (A)
3				Total Number of Dom	inant Species	
4		T-1-1-0		Across All Strata:		(B)
Sapling/Shrub Stratum (Plot size: 15'		=Total Cover		Percent of Dominant Are OBL, FACW, or F		50.0% (A/B)
1. Spiraea douglasii	. <i>'</i> 100	Yes	FACW	Ale OBL, I ACVV, OI I	AC	<u>30.0 %</u> (A/D)
Gaultheria shallon	15	No	FACU	Prevalence Index we	orksheet:	
3. Malus fusca	2	No	FACW	Total % Cover o	f: Multip	ly by:
4. Vaccinium parvifolium	9	No	FACU	OBL species	0 x 1 =	0
5				FACW species1	02 x 2 =	204
	126	=Total Cover			0 x 3 =	0
Herb Stratum (Plot size: 5' )			E4.011		8 x 4 =	192
1. Rubus ursinus 2.	4	<u>No</u>	_FACU_	· —	0 x 5 = 50 (A)	0 396 (B)
2				Prevalence Index	`	( )
4.				1 Tovalonio maex		<del>/-</del>
5.				Hydrophytic Vegeta	tion Indicators:	
6.				1 - Rapid Test for	r Hydrophytic Vege	etation
7.				2 - Dominance To	est is >50%	
8				3 - Prevalence In	dex is ≤3.0 <sup>1</sup>	
9					Adaptations <sup>1</sup> (Prov	
10					ks or on a separate	e sheet)
11		<del></del>		5 - Wetland Non-		1,=
Woody Vine Stratum (Plot size: 5'	4	=Total Cover		Indicators of hydric s	ophytic Vegetation oil and wetland hy	
1.				be present, unless dis		
2				Hydrophytic		
% Bare Ground in Herb Stratum 96		=Total Cover		Vegetation	No _X	<u>(                                     </u>
Remarks:					-	

SOIL Sampling Point: W6-SP2 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Loc<sup>2</sup> Color (moist) % Color (moist) Type<sup>1</sup> (inches) Texture Remarks Loamy/Clayey 0-4 10YR 3/3 100 4-16 10YR 4/4 100 Loamy/Clayey 16 - 18 10YR 3/2 100 Loamy/Clayey <sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils<sup>3</sup>: 2 cm Muck (A10) (LRR A, E) Histosol (A1) Sandy Gleyed Matrix (S4) Histic Epipedon (A2) Sandy Redox (S5) Iron-Manganese Masses (F12) (LRR D) Black Histic (A3) Stripped Matrix (S6) Red Parent Material (F21) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (F22) 1 cm Muck (A9) (LRR D, G) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) <sup>3</sup>Indicators of hydrophytic vegetation and Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, 2.5 cm Mucky Peat or Peat (S2) (LRR G) Redox Depressions (F8) unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** Yes No Χ Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Surface Water (A1) Water-Stained Leaves (B9) (MLRA 1, 2 High Water Table (A2) MLRA 1, 2, 4A, and 4B) 4A, and 4B) Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Oxidized Rhizospheres on Living Roots (C3) Geomorphic Position (D2) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) FAC-Neutral Test (D5) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Depth (inches): Yes

(includes capillary fringe)

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

Remarks:

Depth (inches):

Depth (inches):

Water Table Present?

Saturation Present?

No X

Wetland Hydrology Present? Yes

# WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

Project/Site: Bremerton Airport	City/County:	Bremerton / Kitsap	Sampling Date: 10/23/23
Applicant/Owner: Port of Bremerton		State: WA	Sampling Point: W7-SP1
Investigator(s): M. Brownell and M. Evinger	Section, Town	nship, Range: Sec 14, T23N,	R01W
Landform (hillside, terrace, etc.): concave	Local relief (conca	ave, convex, none): depressi	on Slope (%): 1
Subregion (LRR): LRR A Lat: 47.479469	_	Long: -122.765685	Datum: NAD83
Soil Map Unit Name: Shalcar muck		NWI cla	ssification: PSSC
Are climatic / hydrologic conditions on the site typical for this til	me of year? Yes	s X No (If no,	explain in Remarks.)
Are Vegetation , Soil , or Hydrology signification	intly disturbed? Are "	"Normal Circumstances" prese	nt? Yes X No
Are Vegetation , Soil , or Hydrology naturally		eeded, explain any answers in	
SUMMARY OF FINDINGS – Attach site map sho			·
Hydrophytic Vegetation Present? Yes X No	Is the Sa	ampled Area	
Hydric Soil Present? Yes X No		Wetland? Yes	( No
Wetland Hydrology Present? Yes X No		_	
Remarks:			
Spirea dominated depression on the other side of road from V were no other features present that would make this wetland a		ely 50 percent of the wetland c	ontains spaghnum moss but there
VEGETATION – Use scientific names of plants.			
Abso		dicator	
Tree Stratum (Plot size: 30' ) % Co	ver Species? S	Status Dominance Test v	vorksheet:
1		Number of Domina	•
2. 3.		Are OBL, FACW, o	
4.		Total Number of Do	ominant Species 2 (B)
	=Total Cover	Percent of Domina	
Sapling/Shrub Stratum (Plot size: 15' )		Are OBL, FACW, o	•
1. Spiraea douglasii 85	Yes F	ACW	
2		Prevalence Index	
3		Total % Cove	
4		OBL species	x 1 =
5	=Total Cover	FACW species FAC species	x 2 = x 3 =
Herb Stratum (Plot size: 5' )		FACU species	
1. Carex obnupta 40	Yes	OBL UPL species	x 5 =
2.		Column Totals:	(A) (B)
3.		Prevalence Inde	= B/A =
4			
5		Hydrophytic Vege	
6			for Hydrophytic Vegetation
7		X 2 - Dominance	
8		3 - Prevalence	index is ≤3.0 cal Adaptations¹(Provide supporting
10	<del>_</del>		arks or on a separate sheet)
11.			on-Vascular Plants <sup>1</sup>
40	=Total Cover		ydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size: 5' )		<del>                                   </del>	c soil and wetland hydrology must
1			disturbed or problematic.
2		Hydrophytic	
	=Total Cover	Vegetation	
% Bare Ground in Herb Stratum60		Present? Y	es X No
Remarks:			

SOIL Sampling Point: W7-SP1

Profile Desc Depth	ription: (Describe	to the depti		<b>ment th</b> c Feature		tor or o	confirm the	absence of indi	cators.)	
(inches)	Color (moist)	<u></u> %	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Tex	ture	Remarks	
0-7	10YR 2/1	100	, ,		<u> </u>		Mu	ick		
7-16	5YR 3/4	100					Loamy			
7-10	311(3/4	100					Loanly	Clayey		
<sup>1</sup> Type: C=Cd	oncentration, D=Dep	letion, RM=F	Reduced Matrix, C	S=Cove	red or C	oated S	and Grains.	<sup>2</sup> Location:	PL=Pore Lining, M	=Matrix.
Hydric Soil I	ndicators: (Applica	ble to all LI	RRs, unless othe	rwise n	oted.)			Indicators for I	Problematic Hydri	c Soils <sup>3</sup> :
Histosol			Sandy Gley		rix (S4)				(A10) <b>(LRR A, E)</b>	
	pipedon (A2)		Sandy Red						nese Masses (F12	) <b>(LRR D)</b>
Black His	` '		Stripped M	`	,				Material (F21)	
	n Sulfide (A4)		Loamy Muc	-		(except	MLRA 1)		w Dark Surface (F2	22)
	ck (A9) (LRR D, G)		Loamy Gle	-				Other (Expl	ain in Remarks)	
<u> </u>	Below Dark Surface	e (A11)	Depleted M		•			3, ,, ,		
	irk Surface (A12)		Redox Dar		` '			-	drophytic vegetatio	
	lucky Mineral (S1)	CO) (I DD C)	Depleted D					-	drology must be pre	
	flucky Peat or Peat (		Redox Dep	ressions	S (F8)			uniess disti	urbed or problemati	С.
	_ayer (if observed):									
Type: _ Depth (ir	ochoc):		_				Hydric S	oil Present?	Yes	No
Remarks:			_				Hyuric 30	on Fresent:		
HYDROLO	GY									
Wetland Hyd	drology Indicators:									
Primary Indic	ators (minimum of o	ne is require	ed; check all that a	pply)				Secondary India	cators (2 or more re	equired)
Surface	Water (A1)		Water-Stai	ned Lea	ves (B9)	(excep	t	Water-Stair	ned Leaves (B9) ( <b>M</b>	ILRA 1, 2
X High Wa	ter Table (A2)		MLRA 1	l, 2, 4A,	and 4B)			4A, and	4B)	
X Saturation	,		Salt Crust						atterns (B10)	
	arks (B1)		Aquatic Inv		, ,				Water Table (C2)	
	t Deposits (B2)		X Hydrogen S		•		. (00)		Visible on Aerial Im	agery (C9)
	osits (B3)		Oxidized R			-	oots (C3)	·	c Position (D2)	
<u> </u>	t or Crust (B4) osits (B5)		Presence of Recent Iron			,	lc (C6)	X FAC-Neutra	` '	
	Soil Cracks (B6)		Stunted or				, ,		Mounds (D6) ( <b>LRR</b>	<b>Α</b> )
	on Visible on Aerial I	magery (B7)				(01)(	(K)		e Hummocks (D7)	<b>(A)</b>
	Vegetated Concave			iaiii iii ix	.cmarks)			11031-1104V	c Hummocks (B1)	
Field Observ			- ,							
Surface Water		es	No X	Depth (i	nches):					
Water Table		s X		Depth (i	· -	2				
Saturation Pr	resent? Ye	s X		Depth (i	nches):	0	Wetlan	d Hydrology Pre	sent? Yes X	No
(includes cap	oillary fringe)									
Describe Red	corded Data (stream	gauge, mor	nitoring well, aerial	photos,	previous	inspec	tions), if ava	ailable:		
Remarks										
Remarks:										
Remarks:										

# WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

Project/Site: Bremerton Airport		City/Cou	nty: Bremert	on / Kitsap	Sampling Date:	10/23/23
Applicant/Owner: Port of Bremerton				State: WA	Sampling Point:	W7-SP2
Investigator(s): M. Brownell and M. Evinger		Section, 7	Township, Ra	nge: Sec 14, T23N, R	01W	
Landform (hillside, terrace, etc.): terrace		—— Local relief (co	oncave, conv	ex, none): convex	Slo	pe (%): 1
Subregion (LRR): LRR A Lat: 47.47				22.765661		NAD83
Soil Map Unit Name: Shalcar muck			_		fication: PSSC	
Are climatic / hydrologic conditions on the site typical	for this time o	f year?	Yes X	No (If no, ex		
Are Vegetation , Soil , or Hydrology		•		Circumstances" present?		0
Are Vegetation , Soil , or Hydrology	-			plain any answers in Re		
SUMMARY OF FINDINGS – Attach site m	•			-		tures, etc.
Hydrophytic Vegetation Present? Yes N	lo _ X_	Is the	e Sampled A	rea		
	lo X		n a Wetland'		No X	
Wetland Hydrology Present? Yes N	lo X					
Remarks:  VEGETATION – Use scientific names of	plants.					
	Absolute	Dominant	Indicator			
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Dominance Test wo	rksheet:	
1. Tsuga heterophylla	- <del>7</del>	Yes	FACU	Number of Dominant	•	4 (4)
Pseudotsuga menziesii     Pinus monticola	3	Yes Yes	FACU FACU	Are OBL, FACW, or F		1 (A)
4.		162		Total Number of Dom Across All Strata:	inant Species	5 (B)
<u>-</u>	14	=Total Cover		Percent of Dominant	Species That	<u> </u>
Sapling/Shrub Stratum (Plot size: 15'	)			Are OBL, FACW, or F	•	0.0% (A/B)
1. Gaultheria shallon	70	Yes	FACU			``
2. Pteridium aquilinum	1	No	FACU	Prevalence Index we	orksheet:	
3. Spiraea douglasii	15	No	FACW_	Total % Cover o	f: Multiply	/ by:
4. Tsuga heterophylla	2	<u>No</u>	FACU	OBL species	x 1 =	
5. Pinus monticola	1	No	FACU	FACW species	x 2 =	
Herb Stratum (Plot size: 5' )	94	=Total Cover		FAC species FACU species	x 3 = x 4 =	
1. Carex obnupta	40	Yes	OBL	UPL species		
2.				Column Totals:		(B)
3.					= B/A =	
4.						
5				Hydrophytic Vegeta	tion Indicators:	
6					r Hydrophytic Veget	ation
7.				2 - Dominance To		
8				3 - Prevalence In	ldex is ≤3.01 Adaptations¹(Provi	
9					ks or on a separate	
10 11				5 - Wetland Non-		orioot)
11		=Total Cover			rophytic Vegetation <sup>1</sup>	<sup>1</sup> (Explain)
Woody Vine Stratum (Plot size: 5'	_)			<sup>1</sup> Indicators of hydric s be present, unless dis	soil and wetland hyd	drology must
1. 2.					ACTION OF PRODUCTION	
% Bare Ground in Herb Stratum 60		=Total Cover		Hydrophytic Vegetation Present? Yes	No _ X	
Remarks:						
nomains.						

SOIL Sampling Point: W7-SP2 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Loc<sup>2</sup> Color (moist) % Color (moist) Type<sup>1</sup> (inches) Texture 0-16 10YR 2/2 100 Loamy/Clayey <sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils<sup>3</sup>: 2 cm Muck (A10) (LRR A, E) Histosol (A1) Sandy Gleyed Matrix (S4) Histic Epipedon (A2) Sandy Redox (S5) Iron-Manganese Masses (F12) (LRR D) Black Histic (A3) Stripped Matrix (S6) Red Parent Material (F21) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (F22) 1 cm Muck (A9) (LRR D, G) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) <sup>3</sup>Indicators of hydrophytic vegetation and Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, 2.5 cm Mucky Peat or Peat (S2) (LRR G) Redox Depressions (F8) unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** Yes No Χ Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Surface Water (A1) Water-Stained Leaves (B9) (MLRA 1, 2 High Water Table (A2) MLRA 1, 2, 4A, and 4B) 4A, and 4B) Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Oxidized Rhizospheres on Living Roots (C3) Geomorphic Position (D2) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) FAC-Neutral Test (D5) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Depth (inches): Yes Water Table Present? Depth (inches): Saturation Present? Depth (inches): Wetland Hydrology Present? Yes No X (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

# WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

Project/Site: Bremerton Airport		City/Cour	nty: Bremer	ton / Kitsap	Sampling Date:	10/25/23
Applicant/Owner: Port of Bremerton				State: WA	Sampling Point:	W8-SP1
Investigator(s): M. Brownell and M. Evinger		Section, T	ownship, Ra	inge: Sec 14, T23N, R0	)1W	
Landform (hillside, terrace, etc.): depression		— Local relief (co	oncave, conv	/ex, none): concave	Slop	e (%): 1
Subregion (LRR): LRR A Lat: 47.4	477159		Long: -	122.752428	 Datum:	NAD83
Soil Map Unit Name: Alderwood gravelly sandy loan	n, 8 to 15 perce	nt slopes			fication: Not mappe	d by NWI
Are climatic / hydrologic conditions on the site typica	al for this time o	f year?	Yes X	No (If no, exp	olain in Remarks.)	
Are Vegetation , Soil , or Hydrology	significantly	-		Circumstances" present?		)
Are Vegetation, Soil, or Hydrology	_			xplain any answers in Rei	<del></del>	
SUMMARY OF FINDINGS – Attach site	<del></del>				·	ures, etc.
Hydrophytic Vegetation Present? Yes X Hydric Soil Present? Yes Yes	No X		Sampled A		NoX	
Wetland Hydrology Present? Yes X  Remarks:	No					
VEGETATION – Use scientific names of						
<u>Tree Stratum</u> (Plot size: 30' )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test wor	·kehoot·	
1.		Ореспез	Otatus	Number of Dominant Are OBL, FACW, or F	Species That	2 (A)
3.				Total Number of Dom		(1)
4.	_			Across All Strata:	mant opecies	3 (B)
		=Total Cover		Percent of Dominant S	Species That	
Sapling/Shrub Stratum (Plot size: 15'	)			Are OBL, FACW, or F	AC: 66	6.7% (A/B)
1. Spiraea douglasii	40	Yes	FACW			
2.				Prevalence Index wo		b
3				Total % Cover of OBL species	: Multiply x 1 =	by.
5.				FACW species	x 1 =	
·	40	=Total Cover		FAC species	x3=	
Herb Stratum (Plot size: 5' )		rotal corol		FACU species	x 4 =	
1. Carex obnupta	60	Yes	OBL	UPL species	x 5 =	
2. Phalaris arundinacea		No	FACW	Column Totals:	(A)	(B)
3. Rubus ursinus		No	FACU	Prevalence Index	= B/A =	``
4. Polytrichum commune	20	Yes				
5.				Hydrophytic Vegetat	ion Indicators:	
6.				1 - Rapid Test for	Hydrophytic Vegeta	ation
7.				X 2 - Dominance Te	est is >50%	
8	_			3 - Prevalence Inc	dex is ≤3.0 <sup>1</sup>	
9				· · ·	Adaptations <sup>1</sup> (Provid	
10				data in Remark	s or on a separate s	sheet)
11				5 - Wetland Non-		
	88	=Total Cover		Problematic Hydro	ophytic Vegetation <sup>1</sup>	(Explain)
Woody Vine Stratum (Plot size: 5' 1.	_)			<sup>1</sup> Indicators of hydric so be present, unless dis		
2				Hydrophytic		
% Bare Ground in Herb Stratum 12		=Total Cover		Vegetation	XNo	_
Remarks:						

SOIL Sampling Point: W8-SP1

Profile Desc	ription: (Describe to	the dept	h needed to docu	ment th	ne indica	tor or c	confirm the absence	e of indicators.)			
Depth	Matrix		Redox	k Featur	es						
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks			
0-2	10YR 3/2	100					Loamy/Clayey				
2-3	10YR 2/2	100					Loamy/Clayey				
3-6	10YR 3/3	100					Sandy				
6-16	10YR 3/4	95	10YR 3/6	5	C		Sandy	Distinct redox concentrations			
	101110/4		10111 0/0				Carray	Bistinot redex consentrations			
								_			
							-	_			
<sup>1</sup> Type: C=Co	oncentration, D=Deple	tion, RM=	Reduced Matrix, C	S=Cove	red or Co	ated S	and Grains. <sup>2</sup> Lo	ocation: PL=Pore Lining, M=Matrix.			
Hydric Soil I	Indicators: (Applicab	le to all L	RRs, unless othe	rwise n	oted.)		Indicat	ors for Problematic Hydric Soils <sup>3</sup> :			
Histosol	(A1)		Sandy Gley	yed Mati	rix (S4)		2 c	m Muck (A10) <b>(LRR A, E)</b>			
Histic Ep	pipedon (A2)		Sandy Red	lox (S5)			Iro	n-Manganese Masses (F12) (LRR D)			
Black His	stic (A3)		Stripped M	atrix (S6	6)		Re	d Parent Material (F21)			
Hydroge	n Sulfide (A4)		Loamy Mu	cky Mine	eral (F1) <b>(</b>	except	: MLRA 1) Ve	ry Shallow Dark Surface (F22)			
1 cm Mu	ck (A9) (LRR D, G)		Loamy Gle	yed Mat	rix (F2)		Otl	ner (Explain in Remarks)			
Depleted	Below Dark Surface	(A11)	Depleted M	latrix (F	3)						
Thick Da	ark Surface (A12)		Redox Dar	k Surfac	e (F6)		<sup>3</sup> Indica	tors of hydrophytic vegetation and			
Sandy M	lucky Mineral (S1)		Depleted D	ark Sur	face (F7)		wetland hydrology must be present,				
2.5 cm N	lucky Peat or Peat (S	2) <b>(LRR G</b>	i)Redox Dep	ression	s (F8)		unl	ess disturbed or problematic.			
Restrictive L	_ayer (if observed):										
Type:			<u></u>								
Depth (ir	nches):						Hydric Soil Prese	ent? Yes No _X			
Remarks:						•					
<b>HYDROLO</b>	GY										
Wetland Hyd	drology Indicators:										
_	cators (minimum of on	e is requir	ed; check all that a	apply)			Second	dary Indicators (2 or more required)			
Surface '	Water (A1)		Water-Stai	ned Lea	ves (B9)	(ехсер	t Wa	ater-Stained Leaves (B9) (MLRA 1, 2			
High Wa	ter Table (A2)		MLRA 1	1, 2, 4A,	and 4B)			4A, and 4B)			
Saturation	on (A3)		Salt Crust	(B11)			Dra	ainage Patterns (B10)			
Water M	arks (B1)		Aquatic Inv	ertebrat	es (B13)		Dr	y-Season Water Table (C2)			
Sedimen	t Deposits (B2)		Hydrogen S	Sulfide C	Odor (C1)		Sa	turation Visible on Aerial Imagery (C9)			
Drift Dep	oosits (B3)		Oxidized R	hizosph	eres on L	iving R	oots (C3) X Ge	omorphic Position (D2)			
Algal Ma	t or Crust (B4)		Presence of	of Reduc	ced Iron (	C4)	Sh	allow Aquitard (D3)			
Iron Dep	osits (B5)		Recent Iron				· · · —	C-Neutral Test (D5)			
Surface	Soil Cracks (B6)		Stunted or			(D1) ( <b>L</b> l	<b>RR A</b> ) Ra	ised Ant Mounds (D6) (LRR A)			
	on Visible on Aerial Im		· <del></del> · · ·	lain in R	temarks)		Fro	ost-Heave Hummocks (D7)			
Sparsely	Vegetated Concave	Surface (B	88)								
Field Observ	vations:										
Surface Wate	er Present? Yes				nches): _						
Water Table					nches): _						
Saturation P			No <u>X</u>	Depth (i	nches): _		Wetland Hydro	ogy Present? Yes X No			
(includes cap											
Describe Red	corded Data (stream o	gauge, mo	nitoring well, aerial	photos,	previous	inspec	ctions), if available:				
Pomorko:											
Remarks: Sample plot	located in a depressio	n and in a	n area lower in ton	ogranhv	than the	surrou	nding area. Meets ge	eomorphic position			
Sample plot	.553.04 4 400100010			-g.apily		Janou					

# WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

Project/Site: Bremerton Airport		City/Cour	nty: Bremei	ton / Kitsap	Sampling Date:	10/25/23
Applicant/Owner: Port of Bremerton			•	State: WA	Sampling Point:	W8-SP2
Investigator(s): M. Brownell and M. Evinger		Section, T	ownship, Ra	ange: Sec 14, T23N, R0	)1W	
Landform (hillside, terrace, etc.): terrace		 Local relief (co	ncave, con	/ex, none): none	Slop	e (%): 0
Subregion (LRR): LRR A Lat: 47.4	477106		Long: 1	22.752377	 Datum:	NAD83
Soil Map Unit Name: Alderwood gravelly sandy loan	n, 8 to 15 perce	ent slopes		NWI classi	fication: Not mappe	d by NWI
Are climatic / hydrologic conditions on the site typica	I for this time of	f year?	Yes X	No (If no, ex	olain in Remarks.)	
Are Vegetation, Soil, or Hydrology	significantly				Yes X No	)
Are Vegetation , Soil , or Hydrology				xplain any answers in Re	<u></u>	
SUMMARY OF FINDINGS – Attach site i					•	ures, etc.
Hydrophytic Vegetation Present? Yes	No X	Is the	Sampled A	Area		
	No X	1	n a Wetland		No X	
	No X					
Remarks:  VEGETATION – Use scientific names of	f plants.					
T 01 1 (D) 1 (D)	Absolute	Dominant	Indicator			
Tree Stratum (Plot size: 30')	<u>% Cover</u> 8	Species? No	Status FACU	Dominance Test wo		
Tsuga heterophylla     Pseudotsuga menziesii	<del> 6</del> 0	Yes	FACU	Number of Dominant Are OBL, FACW, or F	•	0 (A)
3.			17100	Total Number of Dom		<u> </u>
4.				Across All Strata:	•	3 (B)
	68	=Total Cover		Percent of Dominant	Species That	
Sapling/Shrub Stratum (Plot size: 15'	)			Are OBL, FACW, or F	•	.0% (A/B
1. Gaultheria shallon	100	Yes	FACU			
2. Cytisus scoparius		<u>No</u>	UPL	Prevalence Index wo		
3.				Total % Cover of		
4				OBL species	x 1 = x 2 =	
5	120	=Total Cover		FACW species FAC species	x 3 =	
Herb Stratum (Plot size: 5' )	120	rotal cover		FACU species	x 4 =	
1. Polystichum munitum	5	Yes	FACU	UPL species	x 5 =	
2.				Column Totals:	(A)	(B)
3.				Prevalence Index	= B/A =	
4						
5				Hydrophytic Vegeta		
6.				l —	Hydrophytic Vegeta	ation
7.				2 - Dominance Te 3 - Prevalence In		
8 9.				<b>—</b>	dex is ≤3.0 Adaptations¹(Provid	le supporting
					s or on a separate	
11				5 - Wetland Non-		,
	5	=Total Cover			ophytic Vegetation <sup>1</sup>	(Explain)
Woody Vine Stratum (Plot size: 5'	)			<sup>1</sup> Indicators of hydric s		
1.				be present, unless dis		
2				Hydrophytic		
% Bare Ground in Herb Stratum95		=Total Cover		Vegetation Present? Yes	No _X	_
Remarks:						

SOIL Sampling Point: W8-SP2 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Loc<sup>2</sup> Color (moist) % Color (moist) Type<sup>1</sup> (inches) Texture 0-2 10YR 2/2 100 Loamy/Clayey 2-16 10YR 4/3 100 <sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils<sup>3</sup>: Sandy Gleyed Matrix (S4) 2 cm Muck (A10) (LRR A, E) Histosol (A1) Histic Epipedon (A2) Sandy Redox (S5) Iron-Manganese Masses (F12) (LRR D) Black Histic (A3) Stripped Matrix (S6) Red Parent Material (F21) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (F22) 1 cm Muck (A9) (LRR D, G) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) <sup>3</sup>Indicators of hydrophytic vegetation and Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, 2.5 cm Mucky Peat or Peat (S2) (LRR G) Redox Depressions (F8) unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** Yes No Χ Remarks: Soils are a sandy loam throughout HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (except Surface Water (A1) Water-Stained Leaves (B9) (MLRA 1, 2 High Water Table (A2) MLRA 1, 2, 4A, and 4B) 4A, and 4B) Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Oxidized Rhizospheres on Living Roots (C3) Geomorphic Position (D2) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) FAC-Neutral Test (D5) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Depth (inches): Yes Water Table Present? Depth (inches): Saturation Present? Depth (inches): Wetland Hydrology Present? Yes No X

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

Remarks:

(includes capillary fringe)

### WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

Project/Site: Bremerton Airport	City/County: Bren	nerton / Kitsap	Sampling Date: 11/6/2023
Applicant/Owner: Port of Bremerton		State: WA	Sampling Point: W8-SP3
Investigator(s): M Brownell and M Evinger	Section, Township,	Range: Sec 14, T23N, R01	1W
Landform (hillside, terrace, etc.): depression	Local relief (concave, c	convex, none): concave	Slope (%): 0-1
Subregion (LRR): LRR A Lat: 47.477104	<del></del> Long	: -122.752508	 Datum:
Soil Map Unit Name: Alderwood gravelly sandy loam, 8 to 15			cation: Not mapped by NWI
Are climatic / hydrologic conditions on the site typical for this		No X (If no, expl	
Are Vegetation , Soil , or Hydrology signifi		al Circumstances" present?	
Are Vegetation , Soil X , or Hydrology natura		, explain any answers in Rem	
SUMMARY OF FINDINGS – Attach site map si			•
Hydrophytic Vegetation Present? Yes X No	Is the Sample	d Area	
Hydric Soil Present? Yes X No	<b>—</b>		No
Wetland Hydrology Present? Yes X No			<del></del>
Remarks:			
Wetland plot replaces one dug in October. The November s than normal according to the USACE Antecedent Precipitac		the delineation from January	/ 2019. Precipitation is wetter
VEGETATION – Use scientific names of plants	s.		
	solute Dominant Indicato		
· — , — , —	Cover Species? Status	-	
1		Number of Dominant S Are OBL, FACW, or FA	•
3.		Total Number of Domir	
4.		Across All Strata:	1 (B)
	=Total Cover	Percent of Dominant S	pecies That
Sapling/Shrub Stratum (Plot size: 15')		Are OBL, FACW, or FA	AC: 100.0% (A/B)
	80 Yes FACW		
2		Prevalence Index wor	
3		Total % Cover of:	
4		OBL species FACW species	x 1 = x 2 =
	80 =Total Cover	FAC species	x 3 =
——————————————————————————————————————		FACU species	x 4 =
1.		UPL species	x 5 =
2.		Column Totals:	(A) (B)
3.		Prevalence Index =	B/A =
4		_	
5		_ Hydrophytic Vegetation	
6		_   <u></u>	Hydrophytic Vegetation
7		X 2 - Dominance Tes	
8. 9.		3 - Prevalence Inde	ex is ≤3.0 Adaptations¹(Provide supportin <u>c</u>
10		_ I · · ·	s or on a separate sheet)
11		— 5 - Wetland Non-V	ascular Plants <sup>1</sup>
	=Total Cover	Problematic Hydro	phytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:)			il and wetland hydrology must
1		be present, unless distu	urbed or problematic.
2	-Total Caver	Hydrophytic	
% Bare Ground in Herb Stratum	=Total Cover	Vegetation Present? Yes _	X No
Remarks:			

SOIL Sampling Point: W8-SP3

Profile Desc	ription: (Describe	to the depth	needed to docu	ıment th	e indica	tor or c	onfirm the	absence of	indicators.)		
Depth	Matrix		Redo	x Featur	es						
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Tex	ture		Remarks	
0-6	10YR 2/1	93	10YR 3/1	7	C	M_	Loamy	/Clayey	Faint re	dox concent	rations
6-12	10YR 4/2	100					Sa	ndy			
-											
<sup>1</sup> Type: C=Co	ncentration, D=Dep	letion, RM=R	Reduced Matrix, C	S=Cove	red or Co	ated S	and Grains.	<sup>2</sup> Locati	on: PL=Pore	e Lining, M=I	Иatrix.
Hydric Soil I	ndicators: (Applica	able to all LF	RRs, unless othe	rwise n	oted.)			Indicators	for Problem	natic Hydric	Soils <sup>3</sup> :
Histosol (	(A1)		Sandy Gle	yed Matı	rix (S4)			2 cm N	/luck (A10) <b>(L</b>	RR A, E)	
Histic Ep	ipedon (A2)		Sandy Red	dox (S5)				Iron-M	anganese Ma	asses (F12)	(LRR D)
Black His	stic (A3)		Stripped M	latrix (S6	6)			Red Pa	arent Materia	ıl (F21)	
Hydroger	n Sulfide (A4)		Loamy Mu	cky Mine	eral (F1) <b>(</b>	except	MLRA 1)	Very S	hallow Dark	Surface (F22	2)
1 cm Mu	ck (A9) (LRR D, G)		Loamy Gle	yed Mat	rix (F2)			X Other	Explain in R	emarks)	
Depleted	Below Dark Surfac	e (A11)	Depleted N	/latrix (F	3)						
Thick Da	rk Surface (A12)		Redox Dar	k Surfac	e (F6)			<sup>3</sup> Indicators	of hydrophyt	ic vegetation	and
	ucky Mineral (S1)		Depleted D	ark Surf	face (F7)			wetlan	d hydrology r	must be pres	ent,
2.5 cm M	lucky Peat or Peat (	S2) <b>(LRR G)</b>	Redox Dep	pressions	s (F8)			unless	disturbed or	problematic	•
Restrictive L	ayer (if observed):										
Type:	Too much water to	get sample	_								
Depth (in	ches):	12	_				Hydric S	oil Present?		Yes X	No
Remarks:											
	beyond 12 inches l										
	rated to clearly sho e presence of clear									w Dark Suna	ice. Based
		Wollding Hyd		511ytio 10	gotation,	10 001	Torudou tria	t como aro rry	u110.		
HYDROLO	GY										
Wetland Hyd	Irology Indicators:										
Primary Indic	ators (minimum of o	one is require	d; check all that a	apply)				-	Indicators (2		
X Surface \	` '		Water-Sta			(excep	t		Stained Leav	ves (B9) ( <b>ML</b>	.RA 1, 2
ı —	ter Table (A2)				and 4B)				and 4B)		
X Saturatio			Salt Crust						ge Patterns (	,	
Water Ma			Aquatic Inv						ason Water	` '	(00)
	t Deposits (B2)		Hydrogen				ooto (CO)		tion Visible o orphic Positio		gery (C9)
	osits (B3)		Oxidized F			-	0018 (C3)		•	` '	
Iron Depo	t or Crust (B4)		Recent Iro		•	,	s (C6)		w Aquitard (D leutral Test (l	-	
	Soil Cracks (B6)		Stunted or				` '		I Ant Mounds	•	Δ)
	n Visible on Aerial	magery (B7)				(D1) ( <b>L</b> 1	(IXA)		Heave Humm		<b></b> )
	Vegetated Concave		` `	alli ili i	omano)				icave mamm	iooko (B1)	
Field Observ		(= 0									
Surface Wate		es X	No	Depth (i	nches).	3					
Water Table				Depth (i	′ –	0					
Saturation Pr				Depth (i	· -	0	Wetlan	d Hydrology	Present?	Yes X	No
(includes cap				1 /	/-			,			-
	corded Data (stream	gauge, mon	itoring well, aeria	photos,	previous	inspec	tions), if ava	ailable:			
	<u> </u>	= 					<u> </u>				
Remarks:											
	ntire wetland had su	rface water (	seasonal ponding	) at a de	pth of at	least 3	inches. We	tland did not	contain surfa	ace water du	ring October
delineation.											

### WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

Project/Site: Bremerton Airport		City/Cour	nty: Bremer	ton / Kitsap	Sampling Date:	10/25/23
Applicant/Owner: Port of Bremerton				State: WA	Sampling Point:	W9-SP1
Investigator(s): M. Brownell and M. Evinger		Section, T	ownship, Ra	nge: Sec 14, T23N, R0	1W	
Landform (hillside, terrace, etc.): depression		 Local relief (co	oncave, conv	ex, none): concave	Slop	e (%): 0-1
Subregion (LRR): LRR A Lat: 47.4	91847		Long: -1	22.752528	 Datum:	NAD83
Soil Map Unit Name: Harstine gravelly ashy sandy lo	am, 0 to 6 perd	cent slopes			fication: Not mappe	d by NWI
Are climatic / hydrologic conditions on the site typical	for this time of	f year?	Yes X	No (If no, exp	olain in Remarks.)	
Are Vegetation , Soil , or Hydrology		-		Circumstances" present?		)
Are Vegetation , Soil , or Hydrology	_			plain any answers in Rer		
SUMMARY OF FINDINGS – Attach site n	_			-	•	ures, etc.
Hydric Soil Present? Yes X Wetland Hydrology Present? Yes X	No No No		Sampled An a Wetland		No	
Remarks:  VEGETATION – Use scientific names of	<u> </u>					
<u>Tree Stratum</u> (Plot size: 30' )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test wor	ksheet:	
1. Salix sitchensis	80	Yes	FACW	Number of Dominant S		
2.				Are OBL, FACW, or F	•	2 (A)
3. 4.				Total Number of Domi Across All Strata:	nant Species	2 (B)
	80	=Total Cover		Percent of Dominant S	Species That	
Sapling/Shrub Stratum (Plot size: 15'	_)			Are OBL, FACW, or F	AC: 100	0.0% (A/B
Spiraea douglasii		Yes	FACW			
2. Alnus rubra	2	No	<u>FAC</u>	Prevalence Index wo		L
3. 4.				Total % Cover of OBL species	: Multiply x 1 =	
5.				FACW species	x1=	
o	22	=Total Cover		FAC species	x3=	
Herb Stratum (Plot size: 5' )				FACU species	x 4 =	
1.				UPL species	x 5 =	
2.				Column Totals:	(A)	(B)
3.				Prevalence Index	= B/A =	
4						
5				Hydrophytic Vegetat		
6.					Hydrophytic Vegeta	ation
7				X 2 - Dominance Te		
8. 9.				3 - Prevalence Inc	ıex ıs ≤૩.υ Adaptations¹(Provid	la aumnartina
					s or on a separate s	
10 11.				5 - Wetland Non-\		,
	<del></del> :	=Total Cover			ophytic Vegetation <sup>1</sup>	(Explain)
Woody Vine Stratum (Plot size: 5'	_)			<sup>1</sup> Indicators of hydric so be present, unless dis		
2.				Hydrophytic		
% Bare Ground in Herb Stratum 100		=Total Cover		Vegetation	X No	
Remarks:				•		_

SOIL Sampling Point: W9-SP1

Depth	cription: (Describe Matrix	to the dep		ı <b>ment τ</b> ι x Featuı		itor or c	onnrm the	absence of	indicators	.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Tex	kture		Remarks	
0-8	10YR 2/1	100					Loamy	//Clayey			
8-16	10YR 2/2	95	10YR 4/6	5	C	M		//Clayey	Promine	nt redox conc	entrations
	101112/2		101111110				Loamy	rolayoy	1 10111110	THE TOGGET CONTO	onti attorio
<sup>1</sup> Type: C=C	oncentration, D=Dep	letion, RM=	Reduced Matrix, C	S=Cove	ered or Co	oated Sa	and Grains	 . <sup>2</sup> Locat	ion: PL=Po	ore Lining, M=	Matrix.
	Indicators: (Application									matic Hydric	
Histosol	(A1)		Sandy Gle	yed Mat	rix (S4)			2 cm l	Muck (A10)	(LRR A, E)	
—— Histic E	pipedon (A2)		Sandy Red					Iron-M	langanese N	Masses (F12)	(LRR D)
—— Black Hi	stic (A3)		Stripped M	latrix (S	6)			Red P	arent Mater	ial (F21)	
— Hydroge	en Sulfide (A4)		Loamy Mu	cky Min	eral (F1)	(except	MLRA 1)	Very S	Shallow Darl	k Surface (F22	2)
1 cm Mu	ıck (A9) (LRR D, G)		Loamy Gle	yed Ma	trix (F2)			Other	(Explain in I	Remarks)	
 Depleted	d Below Dark Surfac	e (A11)	Depleted N	/latrix (F	3)						
Thick Da	ark Surface (A12)		X Redox Dar	k Surfa	ce (F6)			<sup>3</sup> Indicators	of hydroph	ytic vegetatior	n and
Sandy M	lucky Mineral (S1)		Depleted [	ark Su	face (F7)	)		wetlan	d hydrology	must be pres	sent,
2.5 cm N	Mucky Peat or Peat (	(S2) (LRR G	Redox Dep	ression	s (F8)			unless	disturbed of	or problematic	
Restrictive	Layer (if observed)	:									
Type:											
Depth (ii	nches):						Hydric S	oil Present?	?	Yes X	No
Remarks:						•					
HYDROLO	)GV										
-	drology Indicators: cators (minimum of o		red: check all that s	annly)				Secondari	/ Indicators	(2 or more red	uired)
	Water (A1)	one is requi	Water-Sta		aves (RQ)	(ovcon				aves (B9) ( <b>ML</b>	
	ater Table (A2)				, and 4B)		•		-Stained Le. , and 4B)	aves (D9) (IVIL	.NA 1, 2
Saturation			Salt Crust		, and 40)	'			age Patterns	: (B10)	
	larks (B1)		Aquatic Inv		tes (R13)					r Table (C2)	
	nt Deposits (B2)		Hydrogen		, ,					on Aerial Ima	gery (C9)
	posits (B3)		Oxidized F		, ,		oots (C3)		orphic Posit		9-17 (7
`	at or Crust (B4)		Presence			_	( )		w Aquitard		
	oosits (B5)		Recent Iro		,	,	s (C6)		Neutral Test		
	Soil Cracks (B6)		Stunted or							ds (D6) ( <b>LRR</b> .	A)
	on Visible on Aerial	lmagery (B7					,			mocks (D7)	•
X Sparsely	Vegetated Concav	e Surface (E	38)		ŕ					. ,	
Field Obser	vations:										
Surface Wat	er Present? Ye	es	No <u>X</u>	Depth (	inches): _						
Water Table		es			inches):						
Saturation P	resent? Ye	es	No X	Depth (	inches): _		Wetlar	nd Hydrolog	y Present?	Yes X	No
(includes ca	· · · · · · · · · · · · · · · · · · ·										
Describe Re	corded Data (stream	gauge, mo	nitoring well, aeria	photos	, previous	s inspec	tions), if av	ailable:			
Remarks:											

# WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

Project/Site: Bremerton Airport		City/Cour	nty: Bremer	ton / Kitsap	Sampling Date:	10/25/23
Applicant/Owner: Port of Bremerton				State: WA	Sampling Point:	W9-SP2
Investigator(s): M. Brownell and M. Evinger		Section, T	ownship, Ra	ange: Sec 14, T23N, R0	)1W	
Landform (hillside, terrace, etc.): terrace		 Local relief (co	ncave, conv	/ex, none): none	Slop	e (%): 0
Subregion (LRR): LRR A Lat: 47.4	91813		Long: -	122.752583	 Datum:	NAD83
Soil Map Unit Name: Harstine gravelly ashy sandy lo	am, 0 to 6 per	cent slopes		NWI classi	fication: Not mappe	d by NWI
Are climatic / hydrologic conditions on the site typical	for this time of	year?	Yes X	No (If no, exp	olain in Remarks.)	
Are Vegetation, Soil, or Hydrology	significantly of	disturbed? A	re "Normal (	Circumstances" present?	Yes X No	)
Are Vegetation , Soil , or Hydrology				κplain any answers in Re		
SUMMARY OF FINDINGS – Attach site n	_				·	ures, etc.
Hydrophytic Vegetation Present? Yes X	No	Is the	Sampled A	Area		
	No	l l	n a Wetland		No X	
	No X					
Remarks:						
VEGETATION - Use scientific names of	plants.					
Tree Stratum (Plot size: 30' )	Absolute	Dominant	Indicator	Dominance Test wo	rkahaat:	
Tree Stratum (Plot size: 30' )  1. Alnus rubra	<u>% Cover</u> 80	Species? Yes	Status FAC			
Ilex aquifolium	5	No No	FACU	Number of Dominant Are OBL, FACW, or F	•	3 (A)
3.				Total Number of Dom		``
4.				Across All Strata:		4 (B)
	85	=Total Cover		Percent of Dominant	Species That	
Sapling/Shrub Stratum (Plot size: 15'	_)			Are OBL, FACW, or F	AC: 75	6.0% (A/B
1. Rubus spectabilis	30	Yes	FAC FAC			
2. Frangula purshiana		Yes	<u>FAC</u>	Prevalence Index wo		h
3. 4.				Total % Cover of OBL species	: Multiply x 1 =	<del></del>
5.				FACW species		
	50	=Total Cover		FAC species	x 3 =	
Herb Stratum (Plot size: 5' )				FACU species	x 4 =	
1. Pteridium aquilinum	10	No	FACU	UPL species	x 5 =	
2. Polystichum munitum	50	Yes	FACU	Column Totals:	(A)	(B)
3.				Prevalence Index	= B/A =	
4.				Hudranbudia Vanata	ian Indiantana.	
56.				Hydrophytic Vegetat	Hydrophytic Vegeta	ation
7	_			X 2 - Dominance Te		ation
8.				3 - Prevalence Inc		
9.					Adaptations <sup>1</sup> (Provid	de supporting
10					s or on a separate	
11				5 - Wetland Non-	Vascular Plants¹	
	60	=Total Cover		Problematic Hydr	ophytic Vegetation <sup>1</sup>	(Explain)
Woody Vine Stratum (Plot size: 5'	_)			<sup>1</sup> Indicators of hydric s		
1.				be present, unless dis	turbed or problema	tic.
2		-Total O		Hydrophytic		
% Bare Ground in Herb Stratum 480		=Total Cover		Vegetation Present? Yes	X No	
Remarks:						

SOIL Sampling Point: W9-SP2

Depth	Matrix Color (moist)	0/		x Featu		Loc <sup>2</sup>	Tax#			Domonico	
(inches)	Color (moist)		Color (moist)		Type <sup>1</sup>	LUC-	Textur			Remarks	
0-4	10YR 2/2				·		Loamy/Cl				
4-10	10YR 5/2	95	10YR 4/6	5	<u>C</u>	M	Loamy/Cl	ayey _	Prominent	redox conce	ntrations
	_										
	_	:									
	_										
<sup>1</sup> Type: C=0	Concentration, D=De	– – -	=Reduced Matrix (	 CS=Cov	ered or C	oated S	Sand Grains	<sup>2</sup> l ocati	on: PL=Pore	Lining M=N	//atrix
	I Indicators: (Appli					outou c			for Problem		
Histoso			Sandy Gle					2 cm N	luck (A10) <b>(L</b>	.RR A, E)	
	Epipedon (A2)		Sandy Re	dox (S5	)		_		anganese Ma		LRR D)
	Histic (A3)		Stripped N				_		arent Materia		
	en Sulfide (A4)			•	•	(except	t MLRA 1)		hallow Dark		)
	luck (A9) <b>(LRR D, G</b>	)	Loamy Gle	-		` .	<i>′</i> –		Explain in Re	-	,
	ed Below Dark Surfa		X Depleted I	-			_			,	
	Dark Surface (A12)	,	Redox Da				3	Indicators	of hydrophyt	ic vegetation	and
	Mucky Mineral (S1)		Depleted I		` '	)			d hydrology r	•	
	Mucky Peat or Peat	(S2) (LRR (			•	,			disturbed or		,
Restrictive	Layer (if observed	l):									
Type:	root										
Depth (	(inches):	10					Hydric Soil	Present?		Yes X	No
Remarks:											
YDROL											
	ydrology Indicators								Indiantana (O		راه ما)
-	licators (minimum of	one is requi			(DO)	/		•	Indicators (2	•	
	e Water (A1)		Water-Sta				- T		Stained Leav	es (B9) (ML	RA 1, 2
	/ater Table (A2)			, ,	, and 4B	)		•	and 4B)	D40\	
	tion (A3)		Salt Crust		.t (D40)		_	_	ge Patterns (	•	
	Marks (B1)		Aquatic In				_	<b>—</b> ′	ason Water <sup>*</sup>	` '	nom. (CO)
	ent Deposits (B2)		Hydrogen				-	_	tion Visible o		gery (C9)
	eposits (B3)		Oxidized F			_	(001S (C3)		orphic Positio		
	lat or Crust (B4)		Presence			` '	- (C6)		v Aquitard (D	•	
	eposits (B5)		Recent Iro				` ' —		eutral Test ([ Ant Mounds	-	• •
	e Soil Cracks (B6) tion Visible on Aerial	I Imaganı (D'	Stunted or Other (Exp				KK A) _		leave Humm	`	•)
	ly Vegetated Conca		· — · ·	Jiaiii iii i	Nemaiks)		_		leave Hullilli	iocks (D7)	
Field Obse	, ,		,								
Surface Wa	ater Present?	es es	No X	Depth (	inches):						
Water Table		 ′es	No X		inches):						
Saturation I	Present?	es	No X		inches):		Wetland I	Hydrology	Present?	Yes	No >
(includes ca	apillary fringe)				· -						
`	ecorded Data (strea	m gauge, mo	onitoring well, aeria	l photos	s, previou	s inspec	ctions), if availa	able:			
Remarks:											
. tomanto.											

# WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

Project/Site: Bremerton Airport		City/Cour	nty: Bremer	ton / Kitsap	Sampling Date:	11/6/2023
Applicant/Owner: Port of Bremerton				State: WA	Sampling Point:	W10-SP1
Investigator(s): M Brownell and M Evinger		Section, T	ownship, Ra	ange: Sec 14, T23N, R0	1W	
Landform (hillside, terrace, etc.): depression		Local relief (co	ncave, con	/ex, none): concave	Slop	e (%):0
Subregion (LRR): LRR A Lat: 47.49	90946		Long:	122.751281	Datum:	
Soil Map Unit Name: Harstine gravelly ashy sandy loa	am, 0 to 6 per	cent slopes		NWI classif	ication: Not mappe	d by NWI
Are climatic / hydrologic conditions on the site typical	for this time of	year?	Yes	No X (If no, exp	olain in Remarks.)	
Are Vegetation, Soil, or Hydrology	significantly of	disturbed? A	re "Normal	Circumstances" present?	Yes X No	)
Are Vegetation , Soil , or Hydrology	_			cplain any answers in Rei	<u></u>	
SUMMARY OF FINDINGS – Attach site m	-		g point lo	cations, transects,	important feat	ures, etc.
Hydrophytic Vegetation Present? Yes X	No	Is the	Sampled A	Area		
	No		n a Wetland		No	
ladi a saa a a a a a a a <del>aa </del>	No					
Remarks:		l				
Precipitation is wetter than normal according to the U	JSACE Antece	edent Precipita	on Tool res	ults for 11/5/2023.		
VECETATION Has a significan arms of	mla mta					
VEGETATION – Use scientific names of	Absolute	Dominant	Indicator	Τ		
<u>Tree Stratum</u> (Plot size: 30' )	% Cover	Species?	Status	Dominance Test wor	ksheet:	
1				Number of Dominant S	Species That	
2				Are OBL, FACW, or F.	AC:	1 (A)
3.				Total Number of Domi	inant Species	4 (D)
4		=Total Cover		Across All Strata:		1 (B)
Sapling/Shrub Stratum (Plot size: 15'	,——	- Fotal Cover		Percent of Dominant S Are OBL, FACW, or F.		0.0% (A/B
1. Spiraea douglasii	_ / 100	Yes	FACW	Are OBL, I ACW, OIT	<u> 100</u>	0.070 (A/D
2.				Prevalence Index wo	rksheet:	
3.				Total % Cover of	. Multiply	by:
4.				OBL species	x 1 =	
5				FACW species		
	100	=Total Cover		FAC species	x 3 =	
Herb Stratum (Plot size: 5' )				FACU species	x 4 =	
1. 2.				UPL species Column Totals:	x 5 =	(B)
				Prevalence Index	`´	(D)
4.						
5.				Hydrophytic Vegetat	ion Indicators:	
6.				1 - Rapid Test for	Hydrophytic Vegeta	ation
7				X 2 - Dominance Te		
8				3 - Prevalence Inc		
9.					Adaptations <sup>1</sup> (Provid	
10				5 - Wetland Non-	s or on a separate s	sneet)
11		=Total Cover			ophytic Vegetation <sup>1</sup>	(Explain)
Woody Vine Stratum (Plot size: 5'	)	, otal oovel		<sup>1</sup> Indicators of hydric so		
1.	• ′ -   ———			be present, unless dis		
2.				Hydrophytic		
		=Total Cover		Vegetation		
% Bare Ground in Herb Stratum100				Present? Yes	X No	
Remarks:						

SOIL Sampling Point: W10-SP1

Depth	Matrix		Redox	c Featur	es				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Tex	ture	Remarks
0-4	10YR 2/1	100	_				Loamy/	Clayey	
4-6	10YR 3/2	100					Loamy/	Clayey	
6-16	2.5Y 4/2	95	10YR 4/6	5	С	M	Sar		Prominent redox concentrations
1Type: C=Co	ncentration, D=Deple	tion RM-	-Reduced Matrix C		ared or C		and Grains	2l oca	tion: PL=Pore Lining, M=Matrix.
	ndicators: (Applicab					oaleu S	and Grains.		s for Problematic Hydric Soils <sup>3</sup> :
Histosol (			Sandy Gle						Muck (A10) (LRR A, E)
<del></del>	ipedon (A2)		X Sandy Red		` '			_	Manganese Masses (F12) (LRR D)
—— · Black His			Stripped M						Parent Material (F21)
— Hydroger	n Sulfide (A4)		Loamy Mu	cky Min	eral (F1)	(except	MLRA 1)	Very	Shallow Dark Surface (F22)
	ck (A9) (LRR D, G)		Loamy Gle	-					(Explain in Remarks)
X Depleted	Below Dark Surface	(A11)	Depleted N	/latrix (F	3)				
Thick Da	rk Surface (A12)		Redox Dar	k Surfac	e (F6)			<sup>3</sup> Indicator	s of hydrophytic vegetation and
	ucky Mineral (S1)		Depleted D	ark Sur	face (F7)	)		wetla	nd hydrology must be present,
2.5 cm M	ucky Peat or Peat (S	2) <b>(LRR G</b>	Redox Dep	ression	s (F8)			unles	s disturbed or problematic.
Restrictive L	ayer (if observed):								
Type: _			<u> </u>						
Depth (in	ches):		<u> </u>				Hydric S	oil Present	? Yes <u>X</u> No
Remarks:									
HYDROLO	GY								
	GY Irology Indicators:								
Wetland Hyd		e is requir	ed; check all that a	pply)				Secondar	y Indicators (2 or more required)
Wetland Hyd	Irology Indicators:	e is requir	Water-Stai	ned Lea	. ,		t		y Indicators (2 or more required) r-Stained Leaves (B9) ( <b>MLRA 1, 2</b>
Wetland Hyd Primary Indication	Irology Indicators: ators (minimum of on	e is requir	Water-Stai	ned Lea	ves (B9)		t	Wate	r-Stained Leaves (B9) (MLRA 1, 2 a, and 4B)
Wetland Hyd Primary Indica Surface V X High Wat Saturatio	Irology Indicators: ators (minimum of one Water (A1) er Table (A2) n (A3)	e is requir	Water-Stai MLRA Salt Crust	ned Lea <b>1, 2, 4A</b> (B11)	and 4B	)	t	Wate  44  Drain	r-Stained Leaves (B9) (MLRA 1, 2 a, and 4B) age Patterns (B10)
Wetland Hyd Primary Indica Surface V X High Wat Saturatio Water Ma	Irology Indicators: ators (minimum of one Water (A1) ter Table (A2) n (A3) arks (B1)	e is requir	Water-Stai MLRA Salt Crust Aquatic Inv	ned Lea 1, 2, 4A (B11) vertebra	and 4B)	)	t	Wate  44  Drain  Dry-S	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) eason Water Table (C2)
Primary Indicates Surface V X High Wate Saturatio Water Ma Sediment	Irology Indicators: ators (minimum of one Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2)	e is requir	Water-Stai MLRA Salt Crust Aquatic Inv	ned Lea 1, 2, 4A (B11) vertebra Sulfide (	and 4B) tes (B13) Odor (C1	)		Water  4.4 Drain Dry-S Satur	r-Stained Leaves (B9) (MLRA 1, 2 a, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9)
Primary Indica Surface V X High Wat Saturatio Water Ma Sediment Drift Depo	Irology Indicators: ators (minimum of one Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3)	e is requir	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen S	ned Lea 1, 2, 4A (B11) vertebra Sulfide (	tes (B13) Odor (C1 eres on l	) ) Living R		Wate  44  Drain  Dry-S  Satur  X Geom	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) leason Water Table (C2) ation Visible on Aerial Imagery (C9) horphic Position (D2)
Wetland Hyd Primary Indica Surface V X High Wat Saturatio Water Ma Sediment Drift Depo	Irology Indicators: ators (minimum of one Vater (A1) ter Table (A2) in (A3) arks (B1) it Deposits (B2) osits (B3) it or Crust (B4)	e is requir	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen S  Oxidized R  Presence of	ned Lea 1, 2, 4A (B11) vertebra Sulfide ( chizosph	tes (B13) Odor (C1 eres on l	) ) Living R (C4)	oots (C3)	Water 44 Drain Dry-S Satur X Geom	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) leason Water Table (C2) lation Visible on Aerial Imagery (C9) horphic Position (D2) low Aquitard (D3)
Primary Indice Surface V X High Wat Saturatio Water Ma Sediment Drift Depo	Irology Indicators: ators (minimum of one Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5)	e is requir	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen S  Oxidized R  Presence o	ned Lea 1, 2, 4A (B11) vertebra Sulfide ( chizosph of Reduce	tes (B13) Odor (C1 eres on loced Iron (	) Living R (C4) Iled Soi	oots (C3)	Wate  4A Drain Dry-S Satur X Geom Shalld X FAC-	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) leason Water Table (C2) ation Visible on Aerial Imagery (C9) horphic Position (D2) low Aquitard (D3) Neutral Test (D5)
Wetland Hyd Primary Indica Surface V X High Wat Saturatio Water Ma Sediment Drift Depr Algal Mat Iron Depo	Irology Indicators: ators (minimum of one Nater (A1) ter Table (A2) in (A3) arks (B1) it Deposits (B2) osits (B3) it or Crust (B4) osits (B5) Goil Cracks (B6)		Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen S  Oxidized R  Presence of  Recent Iron  Stunted or	ned Lea 1, 2, 4A (B11) vertebra Sulfide ( chizosphor of Reduct n Reduct Stresse	tes (B13) Odor (C1 teres on led Iron (ction in Ti	) Living R (C4) Iled Soi (D1) ( <b>L</b> l	oots (C3)	Wate  4A  Drain  Dry-S  Satur  X Geon  Shalle  X FAC- Raise	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) norphic Position (D2) bw Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A)
Wetland Hyd Primary Indica Surface V X High Wat Saturatio Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundatio	Irology Indicators: ators (minimum of one Mater (A1) ter Table (A2) in (A3) arks (B1) it Deposits (B2) osits (B3) it or Crust (B4) osits (B5) Soil Cracks (B6) in Visible on Aerial Im	agery (B7	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen S  Oxidized R  Presence of Recent Iron  Stunted or  Other (Exp	ned Lea 1, 2, 4A (B11) vertebra Sulfide ( chizosphor of Reduct n Reduct Stresse	tes (B13) Odor (C1 teres on led Iron (ction in Ti	) Living R (C4) Iled Soi (D1) ( <b>L</b> l	oots (C3)	Wate  4A  Drain  Dry-S  Satur  X Geon  Shalle  X FAC- Raise	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) leason Water Table (C2) ation Visible on Aerial Imagery (C9) horphic Position (D2) low Aquitard (D3) Neutral Test (D5)
Wetland Hyd Primary Indica Surface V X High Wat Saturatio Water Ma Sediment Drift Dept Algal Mat Iron Dept Surface S Inundatio Sparsely	Irology Indicators: ators (minimum of one Nater (A1) ter Table (A2) in (A3) arks (B1) it Deposits (B2) osits (B3) it or Crust (B4) osits (B5) Soil Cracks (B6) in Visible on Aerial Im Vegetated Concave S	agery (B7	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen S  Oxidized R  Presence of Recent Iron  Stunted or  Other (Exp	ned Lea 1, 2, 4A (B11) vertebra Sulfide ( chizosphor of Reduct n Reduct Stresse	tes (B13) Odor (C1 teres on led Iron (ction in Ti	) Living R (C4) Iled Soi (D1) ( <b>L</b> l	oots (C3)	Wate  4A  Drain  Dry-S  Satur  X Geon  Shalle  X FAC- Raise	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) norphic Position (D2) bw Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A)
Wetland Hyd Primary Indica Surface V X High Wat Saturatio Water Ma Sediment Drift Dep Algal Mat Iron Depo Surface S Inundatio Sparsely Field Observ	Irology Indicators: ators (minimum of one Nater (A1) ter Table (A2) in (A3) arks (B1) it Deposits (B2) osits (B3) it or Crust (B4) osits (B5) Soil Cracks (B6) in Visible on Aerial Im Vegetated Concave S	agery (B7 Surface (B	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen S  Oxidized R  Presence of Recent Iron  Stunted or  Other (Exp	ned Lea 1, 2, 4A (B11) vertebra Sulfide ( chizosphof Reduc n Reduc Stresse lain in F	and 4B, tes (B13) Odor (C1 teres on leded Iron ( tition in Ti d Plants Remarks)	) Living R (C4) Iled Soi (D1) ( <b>L</b> l	oots (C3)	Wate  4A  Drain  Dry-S  Satur  X Geon  Shalle  X FAC- Raise	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) norphic Position (D2) bw Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A)
Wetland Hyd Primary Indica Surface V X High Wat Saturatio Water Ma Sediment Drift Depr Algal Mat Iron Depo Surface S Inundatio Sparsely Field Observ Surface Water	Irology Indicators: ators (minimum of one Nater (A1) ter Table (A2) in (A3) arks (B1) it Deposits (B2) osits (B3) it or Crust (B4) osits (B5) Goil Cracks (B6) in Visible on Aerial Im Vegetated Concave S rations: er Present? Yes	agery (B7 Surface (E	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen 3  Oxidized R  Presence of Recent Iron  Stunted or  Other (Exp	ned Lea 1, 2, 4A (B11) vertebra Sulfide ( thizosph of Reduc on Reduc Stresse lain in F	tes (B13) Ddor (C1 teres on led Iron (tition in Tid Plants Remarks)	Living R (C4) lled Soi (D1) (Li	oots (C3)	Wate  4A  Drain  Dry-S  Satur  X Geon  Shalle  X FAC- Raise	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) norphic Position (D2) bw Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A)
Wetland Hyd Primary Indica Surface V X High Wat Saturatio Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundatio Sparsely Field Observ Surface Water Water Table I	Irology Indicators: ators (minimum of one Mater (A1) ter Table (A2) in (A3) arks (B1) it Deposits (B2) osits (B3) it or Crust (B4) osits (B5) Soil Cracks (B6) in Visible on Aerial Im Vegetated Concave S rations: ar Present? Yes Present? Yes	agery (B7 Surface (B	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen S  Oxidized R  Presence of Recent Iron  Stunted or  Other (Exp	ned Lea 1, 2, 4A (B11) vertebra Sulfide ( chizosph of Reduc n Reduc Stresse lain in F	tes (B13) Ddor (C1 teres on led Iron (tition in Tid Plants Remarks)  nches):	Living R (C4) (C4) (D1) (L1	loots (C3) ls (C6) RR A)	Wate  4A  Drain  Dry-S  Satur  X Geom  Shalld  X FAC-  Raise  Frost	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) norphic Position (D2) ow Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A) -Heave Hummocks (D7)
Primary Indicates Surface V X High Water Mater M	Irology Indicators: ators (minimum of one Nater (A1) ter Table (A2) in (A3) arks (B1) it Deposits (B2) osits (B3) it or Crust (B4) osits (B5) Soil Cracks (B6) in Visible on Aerial Im Vegetated Concave Strations: ar Present? Yes esent? Yes	agery (B7 Surface (E	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen 3  Oxidized R  Presence of Recent Iron  Stunted or  Other (Exp	ned Lea 1, 2, 4A (B11) vertebra Sulfide ( chizosph of Reduc n Reduc Stresse lain in F	tes (B13) Ddor (C1 teres on led Iron (tition in Tid Plants Remarks)	Living R (C4) lled Soi (D1) (Li	loots (C3) ls (C6) RR A)	Wate  4A  Drain  Dry-S  Satur  X Geom  Shalld  X FAC-  Raise  Frost	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) norphic Position (D2) bw Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A)
Wetland Hyd Primary Indica Surface V X High Wat Saturatio Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundatio Sparsely Field Observ Surface Water Table II Saturation Pro	Irology Indicators: ators (minimum of one Nater (A1) ter Table (A2) in (A3) arks (B1) it Deposits (B2) osits (B3) it or Crust (B4) osits (B5) Soil Cracks (B6) in Visible on Aerial Im Vegetated Concave Strations: ar Present? Yes esent? Yes	agery (B7 Surface (E	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen S  Oxidized R  Presence of Recent Iron  Stunted or  Other (Exp  No  No  No  No	ned Lea 1, 2, 4A, (B11) vertebrar Sulfide ( chizosphor of Reduct Stresse lain in F Depth (i Depth (i	and 4B; tes (B13) Ddor (C1 teres on led tron (ced Iron (	) Living R (C4) Illed Soi (D1) (LI	loots (C3) Is (C6) RR A) Wetlan	Wate  4A  Drain  Dry-S  Satur  X Geom  Shalld  X FAC-  Raise Frost-	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) norphic Position (D2) bw Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A) Heave Hummocks (D7)
Wetland Hyd Primary Indica Surface V X High Wat Saturatio Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundatio Sparsely Field Observ Surface Water Table II Saturation Pro	Irology Indicators: ators (minimum of one Mater (A1) ter Table (A2) in (A3) arks (B1) it Deposits (B2) osits (B3) it or Crust (B4) osits (B5) Soil Cracks (B6) in Visible on Aerial Im Vegetated Concave Sertions: ar Present? Yes esent? Yes illary fringe)	agery (B7 Surface (E	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen S  Oxidized R  Presence of Recent Iron  Stunted or  Other (Exp  No  No  No  No	ned Lea 1, 2, 4A, (B11) vertebrar Sulfide ( chizosphor of Reduct Stresse lain in F Depth (i Depth (i	and 4B; tes (B13) Ddor (C1 teres on led tron (ced Iron (	) Living R (C4) Illed Soi (D1) (LI	loots (C3) Is (C6) RR A) Wetlan	Wate  4A  Drain  Dry-S  Satur  X Geom  Shalld  X FAC-  Raise Frost-	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) norphic Position (D2) bw Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A) Heave Hummocks (D7)
Wetland Hyd Primary Indica Surface V X High Wat Saturatio Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundatio Sparsely Field Observ Surface Water Table II Saturation Pro	Irology Indicators: ators (minimum of one Mater (A1) ter Table (A2) in (A3) arks (B1) it Deposits (B2) osits (B3) it or Crust (B4) osits (B5) Soil Cracks (B6) in Visible on Aerial Im Vegetated Concave Sertions: ar Present? Yes esent? Yes illary fringe)	agery (B7 Surface (E	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen S  Oxidized R  Presence of Recent Iron  Stunted or  Other (Exp  No  No  No  No	ned Lea 1, 2, 4A, (B11) vertebrar Sulfide ( chizosphor of Reduct Stresse lain in F Depth (i Depth (i	and 4B; tes (B13) Ddor (C1 teres on led tron (ced Iron (	) Living R (C4) Illed Soi (D1) (LI	loots (C3) Is (C6) RR A) Wetlan	Wate  4A  Drain  Dry-S  Satur  X Geom  Shalld  X FAC-  Raise Frost-	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) norphic Position (D2) bw Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A) Heave Hummocks (D7)
Wetland Hyd Primary Indica Surface V X High Wat Saturatio Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundatio Sparsely Field Observ Surface Water Table I Saturation Pro (includes cap	Irology Indicators: ators (minimum of one Mater (A1) ter Table (A2) in (A3) arks (B1) it Deposits (B2) osits (B3) it or Crust (B4) osits (B5) Soil Cracks (B6) in Visible on Aerial Im Vegetated Concave Sertions: ar Present? Yes esent? Yes illary fringe)	agery (B7 Surface (E	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen S  Oxidized R  Presence of Recent Iron  Stunted or  Other (Exp  No  No  No  No	ned Lea 1, 2, 4A, (B11) vertebrar Sulfide ( chizosphor of Reduct Stresse lain in F Depth (i Depth (i	and 4B; tes (B13) Ddor (C1 teres on led tron (ced Iron (	) Living R (C4) Illed Soi (D1) (LI	loots (C3) Is (C6) RR A) Wetlan	Wate  4A  Drain  Dry-S  Satur  X Geom  Shalld  X FAC-  Raise Frost-	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) norphic Position (D2) ow Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A) -Heave Hummocks (D7)
Wetland Hyd Primary Indica Surface V X High Wat Saturatio Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundatio Sparsely Field Observ Surface Water Table I Saturation Pro (includes cap	Irology Indicators: ators (minimum of one Mater (A1) ter Table (A2) in (A3) arks (B1) it Deposits (B2) osits (B3) it or Crust (B4) osits (B5) Soil Cracks (B6) in Visible on Aerial Im Vegetated Concave Sertions: ar Present? Yes esent? Yes illary fringe)	agery (B7 Surface (E	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen S  Oxidized R  Presence of Recent Iron  Stunted or  Other (Exp  No  No  No  No	ned Lea 1, 2, 4A, (B11) vertebrar Sulfide ( chizosphor of Reductor Stresse lain in F Depth (i Depth (i	and 4B; tes (B13) Ddor (C1 teres on led tron (ced Iron (	) Living R (C4) Illed Soi (D1) (LI	loots (C3) Is (C6) RR A) Wetlan	Wate  4A Drain Dry-S Satur X Geom Shalld X FAC- Raise Frost-	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) norphic Position (D2) ow Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A) -Heave Hummocks (D7)

#### **U.S. Army Corps of Engineers**

# WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Bremerton Airport		City/Cour	nty: Bremert	on / Kitsap	Sampli	ing Date:	11/6/2023
Applicant/Owner: Port of Bremerton				State: W	<u>/A</u> Sampli	ng Point:	W10-SP2
Investigator(s): M Brownell and M Evinger		Section, T	ownship, Rar	nge: Sec 14, T23	3N, R01W		
Landform (hillside, terrace, etc.): hummock		—– Local relief (co	oncave, conve	ex, none): _conve	эх	Slop	ое (%): 0
Subregion (LRR): LRR A Lat: 47.491				 22.751069			NAD83
Soil Map Unit Name: Harstine gravelly ashy sandy loar	m, 0 to 6 per	cent slopes			classification: I	Not mappe	ed by NWI
Are climatic / hydrologic conditions on the site typical fo			Yes	No X (If r	_		
Are Vegetation, Soil, or Hydrologys							)
Are Vegetation , Soil , or Hydrology					_		
SUMMARY OF FINDINGS – Attach site ma						ant feat	ures, etc.
Hydrophytic Vegetation Present? Yes No		Is the	Sampled A	·ea			
	)		n a Wetland?		No	X	
	<u> </u>			•			
Remarks:		•					
Precipitation is wetter than normal according to the US	SACE Antece	edent Precipita	aon Tool resu	Its for 11/5/2023.			
VEGETATION – Use scientific names of p	lants.						
	Absolute	Dominant	Indicator				
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Dominance Tes	st worksheet:		
1. Alnus rubra	50	Yes	FAC	Number of Dom	•	Γhat	
2. Pseudotsuga menziesii	30	Yes	FACU	Are OBL, FACV			2 (A)
Tsuga heterophylla  4.	5	No	FACU	Total Number of Across All Strate	•	ecies	6 (B)
T	85	=Total Cover					<u>o</u> (b)
Sapling/Shrub Stratum (Plot size: 15'	)			Percent of Dom Are OBL, FACV	•		3.3% (A/B
1. Spiraea douglasii	90	Yes	FACW	•	•		`
2. Cytisus scoparius	5	No	UPL	Prevalence Ind	ex worksheet:		
3				Total % Co	over of:	Multiply	by:
4				OBL species		x 1 =	
5		<del></del>		FACW species		× 2 =	
Herb Stratum (Plot size: 5' )	95	=Total Cover		FAC species		< 3 = < 4 =	
Herb Stratum (Plot size: 5' )  1. Digitalis purpurea	3	Yes	FACU	FACU species UPL species		κ4 = <u></u> κ5 =	
Pteridium aquilinum		Yes	FACU	Column Totals:			(B)
3. Rubus ursinus	5	Yes	FACU		ndex = B/A =		
4.							
5				Hydrophytic Ve	egetation Indic	ators:	
6					est for Hydroph	-	ation
7					nce Test is >50		
8					nce Index is ≤3. ogical Adaptatio		
9					emarks or on a	,	
10 11					Non-Vascular	•	311001)
··· <del></del>	10	=Total Cover			: Hydrophytic V		(Explain)
Woody Vine Stratum (Plot size: 5'	)	20.01		<sup>1</sup> Indicators of hy		_	
1.				be present, unle			
2.				Hydrophytic			
% Bare Ground in Herb Stratum 90		=Total Cover		Vegetation Present?	Yes	No X	
Remarks:				rieseilt.		NU	
Torrand.							

SOIL Sampling Point: W10-SP2

Profile Description: (Des Depth Ma	atrix	Redo	x Feature	es				
(inches) Color (mo	oist) %	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Text	ure	Remarks
0-6 10YR 3/	/2 100					Loamy/0	Clayey	
6-16 2.5Y 4/2	2 90	10YR 4/6	10	С	М	San	dy	Prominent redox concentrations
Type: C=Concentration, [					oated S	and Grains.		ation: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (A	Applicable to all							s for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)		Sandy Gle	•	, ,				Muck (A10) (LRR A, E)
Histic Epipedon (A2)		X Sandy Red	, ,					Manganese Masses (F12) (LRR D)
Black Histic (A3)		Stripped M	`	,				Parent Material (F21)
Hydrogen Sulfide (A4)		Loamy Mu	icky Mine	eral (F1)	(except	MLRA 1)	Very	Shallow Dark Surface (F22)
1 cm Muck (A9) (LRR	D, G)	Loamy Gle	eyed Mat	rix (F2)			Other	r (Explain in Remarks)
X Depleted Below Dark S	Surface (A11)	Depleted I	Matrix (F	3)				
Thick Dark Surface (A	12)	Redox Da	rk Surfac	e (F6)			<sup>3</sup> Indicator	s of hydrophytic vegetation and
Sandy Mucky Mineral (	(S1)	Depleted [	Dark Sur	face (F7)	)		wetla	nd hydrology must be present,
2.5 cm Mucky Peat or	Peat (S2) (LRR	G) Redox De	pression	s (F8)			unles	s disturbed or problematic.
Restrictive Layer (if obse	erved):							
Туре:								
Depth (inches):						Hydric Sc	oil Present	? Yes X No
IYDROLOGY	ato vo							
Wetland Hydrology Indic		iradi abask sll that	annh ()				Sagandar	nuladiantors (2 or more required)
Wetland Hydrology Indica Primary Indicators (minimu				(DO)	(2000			y Indicators (2 or more required)
Netland Hydrology Indica Primary Indicators (minimu Surface Water (A1)	ım of one is requ	Water-Sta	ined Lea			t	Wate	r-Stained Leaves (B9) (MLRA 1, 2
Vetland Hydrology Indica Primary Indicators (minimu Surface Water (A1) High Water Table (A2)	ım of one is requ	Water-Sta MLRA	ined Lea 1, 2, 4A,			t	Wate	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B)
Netland Hydrology Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3)	ım of one is requ	Water-Sta MLRA Salt Crust	ined Lea <b>1, 2, 4A,</b> (B11)	and 4B	)	t	Wate  44	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10)
Primary Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	ım of one is requ	Water-Sta MLRA Salt Crust Aquatic In	ined Lea <b>1, 2, 4A,</b> (B11) vertebrat	and 4B)	)	t	Wate  4/ Drain Dry-S	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) Season Water Table (C2)
Primary Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	ım of one is requ	Water-Sta MLRA Salt Crust Aquatic In Hydrogen	ined Lea <b>1, 2, 4A,</b> (B11) vertebrat Sulfide (	and 4B) tes (B13) Odor (C1	)		Wate  44  Drain  Dry-S  Satur	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) Season Water Table (C2) ation Visible on Aerial Imagery (C9
Wetland Hydrology Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	um of one is requ	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F	ined Lea  1, 2, 4A,  (B11)  vertebrat  Sulfide (  Rhizosph	and 4B) tes (B13) Odor (C1 eres on I	) ) ) Living R		Wate  4/ Drain  Dry-S Satur  Geon	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9 norphic Position (D2)
Primary Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	um of one is requ	Water-Sta MLRA Salt Crust Aquatic In Hydrogen	ined Lea  1, 2, 4A,  (B11)  vertebrat  Sulfide (  Rhizosph	and 4B) tes (B13) Odor (C1 eres on I	) ) ) Living R		Wate  4/ Drain  Dry-S Satur  Geon	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) Season Water Table (C2) ation Visible on Aerial Imagery (C9
Wetland Hydrology Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	um of one is requ	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F	ined Lea  1, 2, 4A, (B11) vertebrat Sulfide ( Rhizosph of Reduc	tes (B13) Odor (C1 eres on l	) ) ) Living R (C4)	oots (C3)	Wate  4/ Drain Dry-S Satur Geon Shall	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9 norphic Position (D2)
Wetland Hydrology Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	um of one is requ	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence	ined Lea  1, 2, 4A, (B11) vertebrat Sulfide C Rhizosph of Reduc	tes (B13) Odor (C1 eres on led Iron (tion in Ti	) ) Living R (C4) illed Soil	oots (C3) s (C6)	Wate  44 Drain Dry-S Satur Geon Shall	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) norphic Position (D2) ow Aquitard (D3)
Primary Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	um of one is requ  2) ) 36)	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or	ined Lea  1, 2, 4A, (B11) vertebrat Sulfide C Rhizosph of Reduc n Reduc	tes (B13) Odor (C1 eres on led Iron (ction in Ti	) ) Living R (C4) illed Soil (D1) ( <b>L</b> I	oots (C3) s (C6)	Wate  44 Drain Dry-S Satur Geon Shall FAC- Raise	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9 norphic Position (D2) ow Aquitard (D3) Neutral Test (D5)
Primary Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B	um of one is requ  2)  36) Aerial Imagery (B	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Lea  1, 2, 4A, (B11) vertebrat Sulfide C Rhizosph of Reduc n Reduc	tes (B13) Odor (C1 eres on led Iron (ction in Ti	) ) Living R (C4) illed Soil (D1) ( <b>L</b> I	oots (C3) s (C6)	Wate  44 Drain Dry-S Satur Geon Shall FAC- Raise	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) norphic Position (D2) low Aquitard (D3) Neutral Test (D5) ad Ant Mounds (D6) (LRR A)
Primary Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B Inundation Visible on A Sparsely Vegetated Co	um of one is requ  2)  36) Aerial Imagery (Boncave Surface (	Water-Sta  MLRA  Salt Crust  Aquatic In  Hydrogen  Oxidized F  Presence  Recent Iro  Stunted or  Other (Exp.	ined Lea 1, 2, 4A, (B11) vertebrat Sulfide ( Rhizosph of Reduc on Reduc Stresse blain in R	and 4B, des (B13) Odor (C1 eres on led Iron ( tion in Tid d Plants demarks)	) ) Living R (C4) illed Soil (D1) ( <b>L</b> l	oots (C3) s (C6)	Wate  44 Drain Dry-S Satur Geon Shall FAC- Raise	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) norphic Position (D2) low Aquitard (D3) Neutral Test (D5) ad Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B Inundation Visible on A Sparsely Vegetated Co Field Observations: Surface Water Present?	um of one is requ  2)  36) Aerial Imagery (Boncave Surface (	Water-Sta  MLRA  Salt Crust  Aquatic In  Hydrogen  Oxidized F  Presence  Recent Iro  Stunted or  Other (Exp  B8)	ined Lea 1, 2, 4A, (B11) vertebrat Sulfide ( Rhizosph of Reduct on Reduct Stresse blain in R	and 4B, tes (B13) Ddor (C1 eres on led Iron (tion in Tid Plants temarks)	) ) Living R (C4) illed Soil (D1) ( <b>L</b> l	oots (C3) s (C6)	Wate  44 Drain Dry-S Satur Geon Shall FAC- Raise	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) norphic Position (D2) low Aquitard (D3) Neutral Test (D5) ad Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B Inundation Visible on A Sparsely Vegetated Co Field Observations: Surface Water Present?	um of one is requ  2)  36) Aerial Imagery (Boncave Surface (	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp B8)  No X No X	ined Lea  1, 2, 4A, (B11) vertebrat Sulfide ( Rhizosph of Reduc on Reduc on Reduc Stresse plain in R	tes (B13) Ddor (C1 eres on led Iron (tition in Tid Plants temarks) anches):nches):nches): _	) ) Living R (C4) illed Soil (D1) ( <b>L</b> l	oots (C3) s (C6) RR A)	Wate  44  Drain  Dry-S  Satur  Geon  Shall  FAC-  Raise  Frost	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) Season Water Table (C2) ation Visible on Aerial Imagery (C9) norphic Position (D2) ow Aquitard (D3) Neutral Test (D5) ad Ant Mounds (D6) (LRR A) -Heave Hummocks (D7)
Primary Indicators (minimumum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B1) Inundation Visible on A1 Sparsely Vegetated Confield Observations: Surface Water Present? Water Table Present? Saturation Present?	um of one is requ  2)  36) Aerial Imagery (Boncave Surface (	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp B8)  No X No X	ined Lea 1, 2, 4A, (B11) vertebrat Sulfide ( Rhizosph of Reduct on Reduct Stresse blain in R	tes (B13) Ddor (C1 eres on led Iron (tition in Tid Plants temarks) anches):nches):nches): _	) ) Living R (C4) illed Soil (D1) ( <b>L</b> l	oots (C3) s (C6) RR A)	Wate  44  Drain  Dry-S  Satur  Geon  Shall  FAC-  Raise  Frost	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) norphic Position (D2) low Aquitard (D3) Neutral Test (D5) ad Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B Inundation Visible on A Sparsely Vegetated Co Field Observations: Surface Water Present?	2) 36) Aerial Imagery (Boncave Surface ( Yes Yes	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp B8)  No X No X	ined Lea  1, 2, 4A, (B11) vertebrat Sulfide ( Rhizosph of Reduc on Reduc on Reduc Stresse plain in R	tes (B13) Ddor (C1 eres on led Iron (tition in Tid Plants temarks) anches):nches):nches): _	) ) Living R (C4) illed Soil (D1) ( <b>L</b> l	oots (C3) s (C6) RR A)	Wate  44  Drain  Dry-S  Satur  Geon  Shall  FAC-  Raise  Frost	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) Season Water Table (C2) ation Visible on Aerial Imagery (C9) norphic Position (D2) ow Aquitard (D3) Neutral Test (D5) ad Ant Mounds (D6) (LRR A) -Heave Hummocks (D7)
Primary Indicators (minimumum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B1) Inundation Visible on A1 Sparsely Vegetated Confield Observations: Surface Water Present? Water Table Present? Saturation Present?	2) Aerial Imagery (Boncave Surface ( Yes Yes Yes Yes	Water-Sta   MLRA   Salt Crust   Aquatic In   Hydrogen   Oxidized F   Presence   Recent Iro   Stunted or   Other (Exp   B8)   No   X   No   X   No   X	ined Lea  1, 2, 4A, (B11) vertebrat Sulfide C Rhizosph of Reduc on Reduc Stresse clain in R  Depth (ii Depth (iii	and 4B, tes (B13) Ddor (C1 eres on leed Iron (tion in Tid Plants demarks)  nches):nches):nches): _	) ) Living R (C4) illed Soil (D1) (LI	oots (C3) s (C6) RR A) Wetland	Wate  44  Drain  Dry-S  Satur  Geon  Shall  FAC-  Raise  Frost	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) Season Water Table (C2) ation Visible on Aerial Imagery (C9) norphic Position (D2) ow Aquitard (D3) Neutral Test (D5) ad Ant Mounds (D6) (LRR A) -Heave Hummocks (D7)
Primary Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B Inundation Visible on A Sparsely Vegetated Co Field Observations: Surface Water Present? Vater Table Present? Saturation Present? Saturation Present? Secribe Recorded Data (S	2) Aerial Imagery (Boncave Surface ( Yes Yes Yes Yes	Water-Sta   MLRA   Salt Crust   Aquatic In   Hydrogen   Oxidized F   Presence   Recent Iro   Stunted or   Other (Exp   B8)   No   X   No   X   No   X	ined Lea  1, 2, 4A, (B11) vertebrat Sulfide C Rhizosph of Reduc on Reduc Stresse clain in R  Depth (ii Depth (iii	and 4B, tes (B13) Ddor (C1 eres on leed Iron (tion in Tid Plants demarks)  nches):nches):nches): _	) ) Living R (C4) illed Soil (D1) (LI	oots (C3) s (C6) RR A) Wetland	Wate  44  Drain  Dry-S  Satur  Geon  Shall  FAC-  Raise  Frost	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) Season Water Table (C2) ation Visible on Aerial Imagery (C9) norphic Position (D2) ow Aquitard (D3) Neutral Test (D5) ad Ant Mounds (D6) (LRR A) -Heave Hummocks (D7)
Primary Indicators (minimumum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B1) Inundation Visible on A1 Sparsely Vegetated Coffield Observations: Surface Water Present? Water Table Present? Saturation Present?	2) Aerial Imagery (Boncave Surface ( Yes Yes Yes Yes	Water-Sta   MLRA   Salt Crust   Aquatic In   Hydrogen   Oxidized F   Presence   Recent Iro   Stunted or   Other (Exp   B8)   No   X   No   X   No   X	ined Lea  1, 2, 4A, (B11) vertebrat Sulfide C Rhizosph of Reduc on Reduc Stresse clain in R  Depth (ii Depth (iii	and 4B, tes (B13) Ddor (C1 eres on leed Iron (tion in Tid Plants demarks)  nches):nches):nches): _	) ) Living R (C4) illed Soil (D1) (LI	oots (C3) s (C6) RR A) Wetland	Wate  44  Drain  Dry-S  Satur  Geon  Shall  FAC-  Raise  Frost	r-Stained Leaves (B9) (MLRA 1, 2 A, and 4B) age Patterns (B10) Season Water Table (C2) ation Visible on Aerial Imagery (C9) norphic Position (D2) ow Aquitard (D3) Neutral Test (D5) ad Ant Mounds (D6) (LRR A) -Heave Hummocks (D7)

#### **U.S. Army Corps of Engineers**

# WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Bremerton Airport		City/Cour	nty: Bremer	ton / Kitsap	Sampling Date:	11/6/2023
Applicant/Owner: Port of Bremerton				State: WA	Sampling Point:	W11-SP1
Investigator(s): M Brownell and M Evinger		Section, T	ownship, Ra	ange: Sec 14, T23N, R0	1W	
Landform (hillside, terrace, etc.): toe of slope	I	_ocal relief (co	ncave, conv	vex, none): concave	Slop	oe (%):2
Subregion (LRR): LRR A Lat: 47.81	137		Long:	122.772251	Datum:	NAD83
Soil Map Unit Name: McKenna gravelly loam				NWI classif	ication: Not mappe	ed by NWI
Are climatic / hydrologic conditions on the site typical	for this time of	year?	Yes	No X (If no, exp	olain in Remarks.)	
Are Vegetation, Soil, or Hydrology	significantly of	disturbed? A	.re "Normal (	Circumstances" present?	Yes X No	)
Are Vegetation , Soil X , or Hydrology	='			ι κplain any answers in Rei		
SUMMARY OF FINDINGS – Attach site m	•		g point lo	cations, transects,	important feat	ures, etc.
Hydrophytic Vegetation Present? Yes X N	lo	Is the	Sampled A	urea		
	10		n a Wetland		No	
	lo					
Remarks:						
Soil pit is located in an area that is ponded to the sur					epression visible in	LiDAR.
Precipitation is wetter than normal according to the L		edent Precipita	on Tool res	ults for 11/5/2023.		
VEGETATION – Use scientific names of						
Tree Stratum (Plot size: 30' )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test wor	ksheet	
1.	70 00101	Ороског.	<u> </u>	Number of Dominant S		
2.				Are OBL, FACW, or F	•	2 (A)
3.				Total Number of Domi	inant Species	
4				Across All Strata:		2 (B)
O colling/Obash Obashus (Dlatains)	, ———:	=Total Cover		Percent of Dominant S		0.00/ ///D
Sapling/Shrub Stratum (Plot size: 15' 1. Spiraea douglasii	_ <sup>)</sup> 20	Yes	FACW	Are OBL, FACW, or F	AC: 10	0.0% (A/B
		165	TACVV	Prevalence Index wo	rksheet:	
3.				Total % Cover of:		by:
4.				OBL species	x 1 =	
5.				FACW species		
	20	=Total Cover		FAC species	x 3 =	
Herb Stratum (Plot size: 5')				FACU species	x 4 =	
1. Phalaris arundinacea	90	Yes	FACW	UPL species	x 5 =	
2. Carex obnupta	8	No No	OBL	Column Totals:	(A)	(B)
Juncus effusus  4.	88	No	<u>FACW</u>	Prevalence Index :	= B/A =	
				Hydrophytic Vegetat	ion Indicators:	
5 6.				, , , ,	Hydrophytic Vegeta	ation
7.				X 2 - Dominance Te		
8.				3 - Prevalence Inc		
9.					Adaptations <sup>1</sup> (Provid	de supporting
10					s or on a separate	
11.				5 - Wetland Non-\	/ascular Plants <sup>1</sup>	
	106	=Total Cover		Problematic Hydro	ophytic Vegetation <sup>1</sup>	(Explain)
Woody Vine Stratum (Plot size: 5'	_)			<sup>1</sup> Indicators of hydric so		
1.				be present, unless dis	turbed or problema	tic.
2				Hydrophytic		
% Bare Ground in Herb Stratum	<sup>-</sup>	=Total Cover		Vegetation Present? Yes	No	<u>-</u>
Remarks:						

SOIL Sampling Point: W11-SP1

	ription: (Describ	e to the depth	needed to doci	ument th	ne indica	tor or c	onfirm the	absence of	indicators.	)	
Depth	Matrix			x Featur							
(inches)	Color (moist)		Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Tex	ture		Remarks	
0-12	10YR 3/3	95	10YR 3/4	5	<u>C</u>	M	Sar	ndy	Faint re	edox concentr	ations
			_								
			_								
	oncentration, D=De					oated Sa	and Grains			re Lining, M=N	
I -	ndicators: (Appli	cable to all LR								matic Hydric	Soils*:
— Histosol			Sandy Gle	-					/luck (A10) <b>(</b>		
I —	ipedon (A2)		Sandy Red						-	lasses (F12) (	(LRR D)
Black His	` '		Stripped M	,	,				arent Materi	, ,	
I —	n Sulfide (A4)		Loamy Mu	•	, ,	except	MLRA 1)			Surface (F22	2)
l <del></del>	ck (A9) <b>(LRR D, G</b>		Loamy Gle	-				X Other	(Explain in F	Remarks)	
l <del></del>	Below Dark Surfa	ce (A11)	Depleted N	•	•			31	- <b>6</b> les reluces les		
l <del></del>	rk Surface (A12)		Redox Da							tic vegetation	
l —	ucky Mineral (S1) lucky Peat or Peat	(S2) (I PP G)	Redox De		` '					must be pres r problematic.	
				pression	3 (1 0)			unic33	uistarbea o	i probicinatic.	
Type:	ayer (if observed. Wate										
Depth (in		12	_				Hydric S	oil Present?	,	Yes X	No
Remarks:			<del>_</del>				,				
	neet any hydric so	il indicators an	d are assumed to	n he hyd	ric becau	se of the	a nresence	of hydronhy	tic vegetatio	n and the amo	ount of
	esent. The soil pit										
inches.							-				
HYDROLO	GY										
Wetland Hyd	drology Indicators	s:									
Primary Indic	ators (minimum of	one is required	d; check all that a	apply)				Secondary	Indicators (	2 or more req	uired)
X Surface	Water (A1)		Water-Sta	ined Lea	ives (B9)	(except	t	Water-	Stained Lea	ves (B9) ( <b>ML</b>	RA 1, 2
X High Wa	ter Table (A2)		MLRA	1, 2, 4A	and 4B)			4A,	and 4B)		
X Saturation	n (A3)		Salt Crust	(B11)				Draina	ge Patterns	(B10)	
Water Ma	arks (B1)		Aquatic In	vertebra	tes (B13)			Dry-Se	eason Water	Table (C2)	
Sedimen	t Deposits (B2)		Hydrogen	Sulfide (	Odor (C1)	)		Satura	tion Visible	on Aerial Imaç	gery (C9)
I —	osits (B3)		Oxidized F			_	oots (C3)		orphic Positi	` '	
I —	t or Crust (B4)		Presence		`	,			w Aquitard (	-	
I —	osits (B5)		Recent Iro						leutral Test		
l <del></del>	Soil Cracks (B6)	(57)	Stunted or			(D1) ( <b>LF</b>	RR A)			s (D6) ( <b>LRR</b>	<b>A</b> )
l <del></del>	on Visible on Aeria	,	. — Other (Exp	olain in F	(emarks			Frost-I	Heave Humr	mocks (D7)	
	Vegetated Conca	ve Surface (B8	)				1				
Field Observ		/ V	NI-	D# "	۱ مام مد	,					
Surface Water		es X		Depth (i	′ -	4					
Water Table Saturation Pr		es X			nches): _		Motion	d Uvdrala	, Proposto	Voc V	No
(includes cap		/es <u>X</u>	No	ո <del>շ</del> հոյ (յ	nches): _	0	vvetian	d Hydrology	, rieselli.	169 <u>V</u>	No
<b>-</b> '	corded Data (strea	m gauge moni	toring well aeria	l photos	previous	inspect	tions) if av	ailable <sup>.</sup>			
200011001100	a Data (3116a	gaago, mom	won, aona	. p.10103	, p. 5 v 10 u c		, ii ave				
Remarks:											
I											

#### **U.S. Army Corps of Engineers**

# WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Bremerton Airport		City/Cour	nty: Bremerto	on / Kitsap	Sampl	ing Date:	11/6/2023
Applicant/Owner: Port of Bremerton				State: V	VA Sampli	ng Point:	W11-SP2
Investigator(s): M Brownell and M Evinger		Section, T	ownship, Rar	nge: Sec 14, T2	3N, R01W		
Landform (hillside, terrace, etc.): slope		 Local relief (co	oncave, conve	ex, none): conv	rex	Slop	e (%): 2
Subregion (LRR): LRR A Lat: 47.48				22.772283		Datum:	
Soil Map Unit Name: McKenna gravelly loam					classification:	Not mappe	ed by NWI
Are climatic / hydrologic conditions on the site typical for	or this time o	f vear?	Yes	No X (If	_		
Are Vegetation, Soil, or Hydrology							)
Are Vegetation , Soil , or Hydrology					_		
SUMMARY OF FINDINGS – Attach site ma						ant feat	ures, etc.
Hydrophytic Vegetation Present? Yes No	o X	Is the	Sampled Ar	rea			·
	o X	l l	n a Wetland?		No	X	
	o <u>X</u>						
Remarks:		•					
Upland pit is upslope from a ponded area which follow than normal according to the USACE Antecedent Pre-				wetland and upla	nd break occur.	Precipitati	on is wetter
VEGETATION – Use scientific names of p	olants.						
Tara Obraham (Districts 200)	Absolute	Dominant	Indicator	D T.	-4ll4-		
Tree Stratum (Plot size: 30' ) 1.	% Cover	Species?	Status		est worksheet:		
				Number of Dor Are OBL, FAC	ninant Species ī <i>N</i> _or FAC <sup>.</sup>	That	1 (A)
3.					of Dominant Spe	ecies	(,
4.				Across All Stra	•		3 (B)
		=Total Cover		Percent of Don	ninant Species T	hat	
Sapling/Shrub Stratum (Plot size: 15'	)			Are OBL, FAC	N, or FAC:	33	3.3% (A/B
1. Rubus laciniatus	10	No	FACU				
2. Gaultheria shallon	<u>20</u> 80	No Yes	FACU_ UPL	Total % C	dex worksheet:		by:
Cytisus scoparius     Vaccinium ovatum	10	No	FACU	OBL species		Multiply x 1 =	by.
5.				FACW species		· · · · · · · · · · · · · · · · · · ·	
	120	=Total Cover		FAC species		k 3 =	
Herb Stratum (Plot size:)				FACU species		< 4 =	
1. Phalaris arundinacea	30	Yes	FACW	UPL species		< 5 =	
2. Polystichum munitum	15	Yes	_FACU_	Column Totals:	`		(B)
3				Prevalence	Index = B/A = _		
4 5.			——	Hydrophytic	egetation Indic	eatore:	
6					est for Hydroph		ation
7.					nce Test is >50	-	
8.				3 - Prevale	nce Index is ≤3.	0 <sup>1</sup>	
9.				4 - Morpho	logical Adaptatio	ons¹(Provid	de supportino
10				data in F	Remarks or on a	separate	sheet)
11					d Non-Vascular		
 	<u>45</u>	=Total Cover			c Hydrophytic V	_	
Woody Vine Stratum (Plot size: 5'	)				ydric soil and w		
1. 2.			—— <b> </b>	·	ess disturbed or	problema	uC.
		=Total Cover		Hydrophytic			
% Bare Ground in Herb Stratum55				Vegetation Present?	Yes	No X	_
Remarks:							

SOIL Sampling Point: W11-SP2

Profile Desc Depth	cription: (Describe to Matrix	the depth		ı <b>ment tl</b> k Featur		tor or o	confirm the	absence of ind	icators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Tex	ture	Remarks	
0-16	10YR 4/3	100					Sar	ndy		
¹Type: C=Co	oncentration, D=Deple	tion, RM=R	Reduced Matrix, C	S=Cove	ered or C	oated S	and Grains	. <sup>2</sup> Location:	PL=Pore Lining, M	=Matrix.
Hydric Soil I	Indicators: (Applicab	le to all LR	RRs, unless othe	rwise n	oted.)			Indicators for	Problematic Hydri	ic Soils³:
Histosol	(A1)		Sandy Gle	yed Mat	rix (S4)			2 cm Mucl	(A10) <b>(LRR A, E)</b>	
	pipedon (A2)		Sandy Red	lox (S5)				Iron-Mang	anese Masses (F12	) (LRR D)
Black His			Stripped M	`	,				t Material (F21)	
·	n Sulfide (A4)		Loamy Mu	-	, ,	(except	MLRA 1)		ow Dark Surface (F	22)
	ck (A9) <b>(LRR D, G)</b>		Loamy Gle	-				Other (Exp	olain in Remarks)	
	d Below Dark Surface (	(A11)	Depleted N					2		
	ark Surface (A12)		Redox Dar		, ,				ydrophytic vegetati	
′	lucky Mineral (S1)	)	Depleted D		, ,			-	drology must be pro	
_	Mucky Peat or Peat (S2	2) (LRR G)	Redox Dep	ression	S (F8)	I		uniess disi	urbed or problemat	IC.
	Layer (if observed):									
Type: _ Depth (ir	achoo):		_				Hudria C	oil Brocont?	Voc	No V
Remarks:			_				nyuric 3	oil Present?	Yes	NoX_
HYDROLO	GY									
Wetland Hyd	drology Indicators:									
Primary Indic	cators (minimum of one	e is require	d; check all that a	pply)				Secondary Ind	icators (2 or more re	equired)
Surface	Water (A1)		Water-Stai	ned Lea	ives (B9)	(excep	t	Water-Stai	ned Leaves (B9) (N	ILRA 1, 2
High Wa	ter Table (A2)		MLRA '	I, 2, 4A	, and 4B)	)		4A, and	d 4B)	
Saturation	on (A3)		Salt Crust	(B11)				Drainage F	Patterns (B10)	
Water M	arks (B1)		Aquatic Inv	ertebra	tes (B13)				n Water Table (C2)	
	nt Deposits (B2)		Hydrogen						Visible on Aerial Im	agery (C9)
	oosits (B3)		Oxidized R			_	toots (C3)		ic Position (D2)	
	t or Crust (B4)		Presence of		,	,			quitard (D3)	
	osits (B5)		Recent Iro						ral Test (D5)	• • \
	Soil Cracks (B6)	(DZ)	Stunted or				RR A)		t Mounds (D6) ( <b>LRF</b>	<b>R A</b> )
	on Visible on Aerial Im		Other (Exp	iain in F	kemarks)			Frost-Heav	ve Hummocks (D7)	
<u> </u>	Vegetated Concave S	Surface (B8	9)							
Field Observ			No. V	D = == #  - /:						
Surface Water					nches): _					
Water Table Saturation Pr					nches): _ nches):		Wetlan	d Hydrology Pr	esent? Yes	No X
(includes cap			NOX	Depui (i	- Inches		vvetian	a riyarology Fi		
	corded Data (stream g	auge, moni	itoring well_aerial	photos	. previous	s insner	tions). if av	ailable:		
2000,000,000	Data (Strouting			٠.،٥٠٥٥	, p. 011000	opoc	,, 11 446			
Remarks:										

#### **U.S. Army Corps of Engineers**

# WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Bremerton Airport		City/Cour	nty: Bremer	ton / Kitsap	Sampling Date:	10/24/23
Applicant/Owner: Port of Bremerton				State: WA	Sampling Point:	W12-SP1
Investigator(s): ME and MB		Section, T	ownship, Ra	nge: Sec 14, T23N, R0	)1W	
Landform (hillside, terrace, etc.): streambed		 Local relief (co	oncave, conv	vex, none): concave	Slo	pe (%): 0
Subregion (LRR): LRR A Lat: 47.48	35861		Long: -	122.767587	 Datum:	NAD83
Soil Map Unit Name: Urban land-Alderwood complex	, 0 to 8 percen	it slopes	_		fication: Not mappe	ed by NWI
Are climatic / hydrologic conditions on the site typical	for this time of	f year?	Yes X	No (If no, ex	plain in Remarks.)	
Are Vegetation , Soil , or Hydrology		-				0
Are Vegetation , Soil , or Hydrology	_			plain any answers in Re		
SUMMARY OF FINDINGS – Attach site m					·	tures, etc.
Hydrophytic Vegetation Present? Yes X I	No	Is the	Sampled A	rea		
	No		n a Wetland		No	
	No					
Remarks:		<u> </u>				
Sample plot located in streambed. North of Stream 3	3. North of roa	d that enters f	rom Gate 30	-		
VEGETATION – Use scientific names of						
<u>Tree Stratum</u> (Plot size: 30' )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test wo	rksheet:	
1	70 00001	Ороскоз:	Otatao	Number of Dominant		
2.				Are OBL, FACW, or F	•	3 (A)
3.				Total Number of Dom	inant Species	
4				Across All Strata:		3 (B)
		=Total Cover		Percent of Dominant	•	
Sapling/Shrub Stratum (Plot size: 15'	_)			Are OBL, FACW, or F	AC: 10	00.0% (A/B)
1. 2.				Prevalence Index wo	arkshoot:	
				Total % Cover of		v hv
				OBL species	x 1 =	
5.				FACW species		
		=Total Cover		FAC species	x 3 =	
Herb Stratum (Plot size: 5' )				FACU species		
1. Juncus effusus	30	Yes	FACW	UPL species	x 5 =	
2. Carex obnupta		Yes	OBL	Column Totals:	(A)	(B)
3. Phalaris arundinacea	50	Yes	FACW	Prevalence Index	= B/A =	
4 5.				Hydrophytic Vegetat	ion Indicators:	
					· Hydrophytic Veget	ation
7.				X 2 - Dominance Te		auon
8.				3 - Prevalence In		
9.				4 - Morphological	Adaptations <sup>1</sup> (Provi	de supporting
10.				data in Remark	s or on a separate	sheet)
11				5 - Wetland Non-		
	100	=Total Cover		Problematic Hydr	ophytic Vegetation	(Explain)
Woody Vine Stratum (Plot size: 5'	_)			<sup>1</sup> Indicators of hydric s		
1.			-	be present, unless dis	sturbed or problema	ITIC.
2	<del>-</del>	=Total Cover		Hydrophytic		
% Bare Ground in Herb Stratum 0		TOTAL COVE		Vegetation Present? Yes	X No	
Remarks:						_
inciliains.						

SOIL Sampling Point: W12-SP1

Profile Desc	ription: (Describe t	o the depth	needed to docu	ıment th	e indica	tor or o	confirm the abse	nce of indicators.)
Depth	Matrix		Redo	x Featur	es			
(inches)	Color (moist)	<u></u> %	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-1	10YR 3/2	100					Loamy/Claye	ey
1-9	10YR 5/1	60	10YR 4/3	30	D	М	Sandy	
			10YR 4/6	10	С	М		
						-		
								<del>_</del> -
1								2
	ncentration, D=Deple					oated S		<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
	ndicators: (Applical	DIE TO AII LR						cators for Problematic Hydric Soils <sup>3</sup> :
— Histosol	ipedon (A2)		X Sandy Rec	•	IX (54)			2 cm Muck (A10) (LRR A, E) Iron-Manganese Masses (F12) (LRR D)
Black His			Stripped M		:)			Red Parent Material (F21)
	n Sulfide (A4)		Loamy Mu			excent		Very Shallow Dark Surface (F22)
	ck (A9) (LRR D, G)		Loamy Gle	-		охоор	_	Other (Explain in Remarks)
	Below Dark Surface	(A11)	Depleted N	-				Curer (Explain in Normanie)
	rk Surface (A12)	(****)	Redox Dar	•	•		<sup>3</sup> Ind	icators of hydrophytic vegetation and
	ucky Mineral (S1)		Depleted D					wetland hydrology must be present,
	lucky Peat or Peat (S	(2) (LRR G)	Redox Dep					unless disturbed or problematic.
Restrictive L	.ayer (if observed):							
Type:	hardpan							
Depth (in	iches):	9	<del>-</del> -				Hydric Soil Pro	esent? Yes X No
Remarks:								
	•		•	s a mixe	d matrix	with 60	percent 10YR 5/1	1 and 40 percent 10YR 4/3. The matrix
contains 10 p	ercent redox concen	trations that	are 10YR 4/6.					
HYDROLO	GY							
Wetland Hyd	Irology Indicators:							
	ators (minimum of or	ne is require	d; check all that a	apply)			Sec	ondary Indicators (2 or more required)
	Water (A1)		Water-Stai		, ,			Water-Stained Leaves (B9) (MLRA 1, 2
<u> </u>	ter Table (A2)				and 4B)			4A, and 4B)
X Saturatio	, ,		Salt Crust	` '	<i>(</i> = )			Drainage Patterns (B10)
	arks (B1)		Aquatic Inv		, ,			Dry-Season Water Table (C2)
	t Deposits (B2)		Hydrogen					Saturation Visible on Aerial Imagery (C9)
	osits (B3) t or Crust (B4)		Oxidized R	•		Ū	` ' —	Geomorphic Position (D2) Shallow Aquitard (D3)
	osits (B5)		Recent Iron		,	,		FAC-Neutral Test (D5)
	Soil Cracks (B6)		Stunted or				` '	Raised Ant Mounds (D6) (LRR A)
	on Visible on Aerial In	nagery (B7)	Other (Exp			(5.)(=		Frost-Heave Hummocks (D7)
	Vegetated Concave	,			,			(= ',
Field Observ			-					
Surface Water		3	No X	Depth (i	nches):			
Water Table	Present? Yes	3 X		Depth (i	nches):	7		
Saturation Pr	esent? Yes	s X	No	Depth (i	nches):	0	Wetland Hyd	Irology Present? Yes X No
(includes cap	illary fringe)							
Describe Red	corded Data (stream	gauge, mon	toring well, aerial	photos,	previous	inspec	ctions), if available	e:
<u> </u>								
Remarks:								

#### **U.S. Army Corps of Engineers**

## WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Bremerton Airport		City/Cour	nty: Bremert	on / Kitsap	Sampling Date:	10/24/23
Applicant/Owner: Port of Bremerton				State: WA	Sampling Point:	W12-SP2
Investigator(s): ME and MB		Section, T	ownship, Rai	nge: Sec 14, T23N, R0	)1W	
Landform (hillside, terrace, etc.): slope		— Local relief (co	oncave, conv	ex, none): convex	Slop	e (%): 3
Subregion (LRR/MLRA): LRR A	Lat:	47.485842	2 L	.ong: -122.767561	 Datum:	NAD83
Soil Map Unit Name: Urban land-Alderwood comple					 fication: Not mappe	d by NWI
Are climatic / hydrologic conditions on the site typica			Yes X	No (If no, exp		•
Are Vegetation , Soil , or Hydrology		•				1
Are Vegetation, Soil, or Hydrology				olain any answers in Re		
SUMMARY OF FINDINGS – Attach site				·	·	ures, etc.
Hydrophytic Vegetation Present? Yes X	No	Is the	Sampled A	rea		
Hydric Soil Present? Yes	No X		n a Wetland		No X	
Wetland Hydrology Present? Yes	No X				· ——	
Remarks: Plot located upslope from W12-SP1.  VEGETATION – Use scientific names or	f plants.					
	Absolute	Dominant	Indicator			
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Dominance Test wor		
1. 2.				Number of Dominant : Are OBL, FACW, or F	•	2 (A)
3.				Total Number of Dom		(1)
4.				Across All Strata:	mant Species	3 (B)
		=Total Cover		Percent of Dominant S	Species That	
Sapling/Shrub Stratum (Plot size: 15'	)			Are OBL, FACW, or F	•	6.7% (A/B)
Populus trichocarpa	40	Yes	<u>FAC</u>			
2. Cytisus scoparius		Yes	UPL	Prevalence Index wo		
3. Salix sitchensis	10	No	FACW_	Total % Cover of		by:
5.				OBL species	x 1 = x 2 =	
5	70	=Total Cover		FACW species FAC species	x 2 =	
Herb Stratum (Plot size: 5' )		rotal corol		FACU species	x 4 =	
1. Plantago lanceolata	5	No	FACU	UPL species	x 5 =	
2. Hypochaeris radicata	3	No	FACU	Column Totals:	(A)	(B)
3. Unknown grass	80	Yes	FAC	Prevalence Index	= B/A =	
4						
5.				Hydrophytic Vegetat		··
6.				X 2 - Dominance Te	Hydrophytic Vegeta	ition
7. 8.				3 - Prevalence Inc		
					Adaptations <sup>1</sup> (Provid	le supporting
10.					s or on a separate s	
11.				5 - Wetland Non-	Vascular Plants <sup>1</sup>	
	88	=Total Cover		Problematic Hydr	ophytic Vegetation <sup>1</sup>	(Explain)
Woody Vine Stratum (Plot size: 5'	_)			<sup>1</sup> Indicators of hydric so be present, unless dis		
2.				Hydrophytic		
% Bare Ground in Herb Stratum 22		=Total Cover		Vegetation	X No	_
Remarks: Unknown grass assumed FAC			Į			

SOIL Sampling Point: W12-SP2

Depth	ription: (Describe t Matrix	.o uie deptr		ı <b>ment tr</b> x Featur		tor of C	ommin the	ansence of	maicators.j	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Text	ture	Remarks	
0-16	10YR 3/2	100					Sar	ndy		
<sup>1</sup> Type: C=Co	oncentration, D=Depl	etion, RM=F	Reduced Matrix, C	S=Cove	red or Co	oated Sa	and Grains.	Locatio	on: PL=Pore Lining, M=	Matrix.
	ndicators: (Applica						-		for Problematic Hydric	
Histosol	٠		Sandy Gle		•				luck (A10) (LRR A, E)	
	ipedon (A2)		Sandy Red	-	, ,				anganese Masses (F12)	(LRR D)
Black His			Stripped M		6)				arent Material (F21)	` ,
—— Hydrogei	n Sulfide (A4)		Loamy Mu	cky Mine	eral (F1)	(except	MLRA 1)	Very SI	hallow Dark Surface (F2	2)
	ck (A9) (LRR D, G)		Loamy Gle	-					Explain in Remarks)	•
 Depleted	l Below Dark Surface	(A11)	Depleted N	/latrix (F	3)					
Thick Da	rk Surface (A12)		Redox Dar	k Surfac	e (F6)			<sup>3</sup> Indicators	of hydrophytic vegetatio	n and
Sandy M	ucky Mineral (S1)		Depleted [	ark Sur	face (F7)			wetland	d hydrology must be pre	sent,
2.5 cm M	Mucky Peat or Peat (	62) <b>(LRR G)</b>	Redox Dep	ression	s (F8)			unless	disturbed or problemation	<b>)</b> .
Restrictive L	ayer (if observed):									
Type:	,									
Depth (in	nches):		_				Hydric So	oil Present?	Yes	No X
Remarks:	<u>'</u>									<u></u>
Soil dry grave	elly sand									
HYDROLO										
_	drology Indicators:									
-	ators (minimum of o	ne is require							Indicators (2 or more re	
	Water (A1)		Water-Sta				t		Stained Leaves (B9) (M	LRA 1, 2
	ter Table (A2)				and 4B)			•	and 4B)	
Saturatio			Salt Crust		(5.40)				ge Patterns (B10)	
	arks (B1)		Aquatic Inv						ason Water Table (C2)	(00)
	t Deposits (B2)		Hydrogen		, ,		(00)		tion Visible on Aerial Ima	agery (C9)
	osits (B3)		Oxidized R			_	5018 (C3)		orphic Position (D2)	
	t or Crust (B4) osits (B5)		Presence		,	•	o (C6)		v Aquitard (D3)	
	Soil Cracks (B6)		Recent Iro Stunted or						eutral Test (D5) Ant Mounds (D6) ( <b>LRR</b>	۸۱
	on Visible on Aerial Ir	madery (R7)				(D1) ( <b>L</b> 1	NN A)		leave Hummocks (D7)	A)
	Vegetated Concave			nani iii iv	ciliaiks)				leave Hullillocks (D1)	
<u>—                                     </u>		Odriace (De	, , , , , , , , , , , , , , , , , , ,				1			
Field Observ Surface Water		c	No. Y	Donth (i	nchoe):					
Water Table				Depth (i Depth (i	_					
Saturation Pr				Depth (i	· -		Wetland	d Hydrology	Present? Yes	No X
(includes cap			<u> </u>	Dopui (i			1.000	a riyarology		
· · · · · ·	corded Data (stream	gauge, mon	itoring well. aeria	photos	previous	inspec	tions), if ava	ailable:		
	(	J J , z	J -::, :::31.12	,		1	,, =			
Remarks:										
Dry. No hydro	ology observed									

#### AGENCY DISCLOSURE NOTIFICATION

The public reporting burden for this collection of information, OMB Control Number 0710-0024, is estimated to average 30 minutes per response, including the timefor reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR REQUEST TO THE ABOVE EMAIL.

#### PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned. System of Record Notice (SORN). The information received is entered into our permit tracking database and a SORN has been completed (SORN #A1145b) and may be accessed at the following website: http://dpcld.defense.gov/Privacy/SORNsIndex/DOD-wide-SORN-Article-View/Article/570115/a1145b-ce.aspx

# ATTACHMENT D: WETLAND RATING FORMS

### **RATING SUMMARY - Western Washington**

Name of wetland (or ID#): 1 Date of site visit: 10/03/2023

Rated By: Matthew Evinger Trained by Ecology? Yes [X] No [] Date of Training:

06/09/2022

**HGM Class used for rating:** Depressional **Wetland has multiple HGM classes? Yes** [] **No** [X]

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

**OVERALL WETLAND CATEGORY: [Category III]** (based on functions [X] 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	
Site Potential	Н	М	М	
Landscape Potential	M	L	Н	
Value	Н	L	М	Total
Score Based on Ratings	8	4	7	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	
Wetland of High Conservation Value	
Bog	
Forested	
Coastal Lagoon	
Interdunal	
None of the above	Not Applicable

#### Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

•		
Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.	4 E- <b>1</b> 01
Hydroperiods	D 1.4, H 1.2	E- <b>6</b> 2
Location of outlet (can be added to map of hydroperiods)	D 1.1, D 4.1	E- <b>9</b> 3
Boundary of area within 150 ft of the wetland (can be added to another figure)	D 2.2, D 5.2	E- <b>0</b> 4
Map of the contributing basin	D 4.3, D 5.3	E- <b>9</b> 5
1km Polygon: Area that extends 1km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.	3 E- <b>9</b> 6
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	E- <b>Ø</b> 7
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	E- <b>0</b> 8

#### **DEPRESSIONAL AND FLATS WETLANDS**

Water Quality Functions - Indicators that the site functions to improve water quality

Area seasonally ponded is < 25% total		points = 2 points = 0	Score:	2
Area seasonally ponded is > 25% total		points = 4 points = 2		
Area seasonally ponded is > 50% total	asonal ponding or inundation in the wetland area?			
Wetland has persistent, ungrazed plant		points = 0	Score:	5
Wetland has persistent, ungrazed plant		points = 1	C	_
Wetland has persistent, ungrazed, plan		points = 3		
Wetland has persistent, ungrazed, plan		points = 5		
<b>D 1.3</b> What are the characteristics and	·			
None of the above		points = 0	Score:	4
Soil texture identified as clay or organic	by laboratory test	points = 4		
Soil texture identified as clay or organic	in field	points = 4		
Mapped as true clay or organic (muck o	or peat)	points = 4		
<b>D 1.2</b> Can the soil 2in below the surface	e be identified as true clay or organic soil?			
Wetland is a flat depression whose out	et is a permanently flowing ditch.	points = 1	Score:	3
permanently flowing		points = 1		
Wetland has an unconstricted, or slight	ly constricted, surface outlet that is	noints - 1		
Wetland has an intermittently flowing,	or highly constricted, outlet.	points = 2		
Wetland has no surface water outlet.		points = 3		
<b>D 1.1</b> What are the characteristics of su	irface water outflows from the wetland?			

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	points = 1		
No	points = 0	core:	0
D 2.2 <u>Is &gt;10% of the area within 150ft of the wetland in land up</u>	ises that generate pollutants in surface runoff?		
Yes	points = 1		
No	points = 0	core:	0
<b>D 2.3</b> Are there septic systems within 250ft of the wetland?			
Yes	points = 1		
No	points = 0	Score:	1
D 2.4 Are there other sources of pollutants coming into the we	etland that are not listed in questions D 2.1-D 2.3?		
Yes	points = 1		
No	points = 0	core:	1

<b>D 2.5</b> What are the other sources of pollutants coming into the wetland?	
trash, human waste	
Total for D 2:	2

Rating of Landscape Potential	[] <b>3-4</b> = <b>H</b> [X] <b>1-2</b> = <b>M</b> [] <b>0</b> = <b>L</b>	Record to
-------------------------------	---------------------------------------------------------------------------	-----------

3 , 1 3	ential	[] 3-4 = H [X] 1-2 = M [] 0 = L	Record the rating on the first page
---------	--------	---------------------------------	-------------------------------------

	3		
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 w	vater that is on th	e 303(d)	
list?			
Yes	points = 1		
No	points = 0	Score:	0
<b>D 3.2</b> Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list?			
Yes	points = 1		
No	points = 0	Score:	0
D 3.3 Has the site been identified in a watershed or local plan as important for maintaining wa	ater quality?		
Yes	points = 2		
No	points = 0	Score:	2
	Total for D 3:	2	

**Rating of Value** [X] 2-4 = H[] 1 = M[] 0 = LRecord the rating on the first page

#### **DEPRESSIONAL AND FLATS WETLANDS**

Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradtion

#### D 4.0 Does the site have the potential to reduce flooding and erosion?

<b>D 4.1</b> What are the characteristics of surface water outflows from the wetland?		
Wetland has no surface water outlet.	points = 4	
Wetland has an intermittently flowing, or highly constricted, outlet.	points = 2	
Wetland is a flat depression whose outlet is a permanently flowing ditch.	points = 1	
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	Score: 4
D 4.2 What is the depth of storage during the wet periods?		
Marks of ponding are 3ft or more above the surface or bottom of the outlet.	points = 7	
Marks of ponding are between 2ft to <3ft from the surface or bottom of the outlet.	points = 5	
Marks of ponding are at least 0.5ft to <2ft from the surface or the bottom of the outlet.	points = 3	
The wetland is a "headwater" wetland.	points = 3	
The wetland is flat but has small depressions on the surface that trap water.	points = 1	
Marks of ponding are less than 0.5ft (6in).	points = 0	Score: 0

Wetland name or number: 1				
<b>D 4.3</b> What is the contribution of the	wetland to storage in the watershed?			
The area of the basin is less than 10 ti	mes the area of the unit	points = 5		
The area of the basin is 10 to 100 time	es 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	Score:	5
		Total for D 4:	9	
Rating of Site Potential	[] 12-16 = H [X] 6-11 = M [] 0-5 = L	Record the rating on t	the first p	age
D 5.0 Does the landscape have the p	octential to support hydrologic functions of t	he site?		
D 5.1 Does the wetland unit receive st	cormwater discharges?			
Yes		points = 1		
No		points = 0	Score:	0
<b>D 5.2</b> <u>Is &gt;10% of the area within 150 f</u>	t of the wetland in land uses that generate exce	ss runoff?		
Yes		points = 1		
No		points = 0	Score:	0
D 5.3 Is more than 25% of the contrib	uting basin of the wetland covered with intensiv	<u>re human land uses?</u>		
Yes		points = 1		
No		points = 0	Score:	0
		Total for D 5:	0	
Rating of Landscape Potential	[] 3 = H[] 1-2 = M[X] 0 = L	Record the rating on t	the first p	age
D 6.0 Are the hydrologic functions p	provided by the site valuable to society?			
<b>D 6.1</b> <u>Is the wetland in a landscape that the second in </u>	at has flooding problems?			
Flooding occurs in a sub-basin that is	immediately down-gradient of the wetland.	points = 2		
Surface flooding problems are in a sub	o-basin farther down-gradient.	points = 1		
Flooding from groundwater is an issue	e in the basin.	points = 1		
The existing or potential outflow from	the wetland is so constrained that water	points = 0		
cannot reach areas that flood.		points – o		
There are no problems with flooding of	downstream of the wetland.	points = 0	Score:	0
D 6.2 Has the site been identified as in	mportant for flood storage or flood conveyance	in a regional flood contro	ol plan?	
Yes		points = 2		
No		points = 0	Score:	0
		Total for D 6:	0	

**Rating of Value** 

[] **2-4** = **H**[] **1** = **M**[X] **0** = **L** 

Record the rating on the first page

#### **HABITAT FUNCTIONS**

**These questions apply to wetlands of all HGM classes** - Indicators that the site functions to provide important habitat

#### H 1.0 Does the wetland have the potential to provide habitat for many species?

H 1.1 What is the structure of the plant community?		
Aquatic Bed		
<b>✓</b> Emergent		
✓ Scrub-shrub		
Forested		
Multiple strata within the Forested class (canopy, sub-canopy, shrubs, herbaceous,		
moss/ground cover)		
4 structures or more	points = 4	
3 structures	points = 2	
2 structures	points = 1	
1 structure	points = 0	
No structures present	points = 0	Score: 1
H 1.2 What are the hydroperiods that meet the size thresholds in the wetland?		
✓ Permanently flooded or inundated		
Seasonally flooded or inundated		
Occasionally flooded or inundated		
Saturated only		
Permanently flowing stream or river in, or adjacent to, the wetland		
Seasonally flowing stream in, or adjacent to, the wetland		
Lake Fringe wetland		
Freshwater Tidal wetland		
4 or more types present	points = 3	
3 types present or Lake Fringe / Freshwater Tidal Fringe	points = 2	
2 types present	points = 1	
1 type present	points = 0	
None present	points = 0	Score: 2
H 1.3 What is the richness of the plant species in the wetland?		
>19 species	points = 2	
5-19 species	points = 1	
<5 species	points = 0	Score: 1

Wetland name or number: 1			
H 1.4 What is the interspersion of habitats?			
High	points = 3		
Moderate	points = 2		
Low	points = 1		
None	points = 0	Score:	2
H 1.5 What are the special habitat features in the wetland?			
Large, downed, woody debris within the wetland (>4in diameter and 6ft long).			
✓ Standing snags (dbh >4in) within the wetland			
Undercut banks are present for at least 6.6ft (2m) and/or overhanging plants			
extend at least 3.3ft (1m) over open water or a stream (or ditch) in, or contiguous with			
the wetland, for at least 33ft (10m)			
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 (cut shrubs			
or trees that have not yet weathered where wood is exposed)			
At least 0.25ac of thin-stemmed persistent plants or woody branches are present			
in areas that are permanently or seasonally inundated (structures for egg-laying by			
amphibians)			
Invasive plants cover less than 25% of the wetland area in every stratum of plants			
(see H 1.1 for list of strata)			
6 habitats selected	points = 6		
5 habitats selected	points = 5		
4 habitats selected	points = 4		
3 habitats selected	points = 3		
2 habitats selected	points = 2		
1 habitat selected	points = 1		
No habitats selected	points = 0	Score:	3
	Total for H 1:	9	

**Rating of Site Potential** 

[] **15-18 = H** [X] **7-14 = M** [] **0-6 = L** 

Record the rating on the first page

#### H 2.0 Does the landscape have the potential to support habitat functions of the site?

H 2.1 What is the percentage of accessible habitat within 1km of the wetland?		
>33% of 1km Polygon	points = 3	
20-33% of 1km Polygon	points = 2	
10-19% of 1km Polygon	points = 1	
<10% of 1km Polygon	points = 0	Score: 1
H 2.2 What is the percentage of total habitat in a 1km polygon around the wetland?		
Total habitat is >50% of the Polygon	points = 3	
Total habitat is 10-50% of the Polygon and in 1-3 patches	points = 2	
Total habitat is 10-50% of the Polygon and in >3 patches	points = 1	
Total habitat is <10% of the Polygon	points = 0	Score: 3

Wetland				h	1
vvetiand	name	or r	าเเทเ	ner.	ı

H 2.3 What is the land use intensity in	the 1km polygon?			
50% of the Polygon is high intensity la	nd use	points = -2		
<50% of the Polygon is high intensity	land use	points = 0	Score:	0
		Total for H 2:	4	
Rating of Landscape Potential	[X] <b>4-6</b> = <b>H</b> [ ] <b>1-3</b> = <b>M</b> [ ] <b>0</b> = <b>L</b>	Record the rating on t	the first p	aae

#### H 3.0 Is the habitat provided by the site valuable to society?

Total for H	3: 1
The site does not meet any of the criteria for societal value points = 0	Score: 1
The site has 1 or 2 WDFW priority habitats within 100m points = 1	
for societal value	
The wetland has 3 or more WDFW priority habitats within 100m, or meets the criteria points = 2	
The wetland has been categorized as an important habitat site in a local plan	
The wetland is a Wetland of High Conservation Value	
The wetland is mapped as a location for an individual WDFW priority species	
The wetland provides habitat for Threatened or Endangered species	
The following criteria automatically score 2 points:	
Talus	
Snags and Logs	
Cliffs	
Caves	
Nearshore (Coastal, Open Coast, Puget Sound)	
Instream	
Fresh Deepwater	
Westside Prarie	
Riparian	
Oregon White Oak	
Old-growth/Mature Forests	
Herbaceous Balds	
✓ Biodiversity Areas and Corridors	
Aspen Stands	
H 3.1 Does the site provide habitat for species valued in laws, regulations, or policies?	

**Rating of Value** 

[] 2 = H [X] 1 = M [] 0 = L

Record the rating on the first page

#### **CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS**

#### **SC 1.0 Estuarine Wetlands**

SC 1.1 Does the wetland meet all of the following criteria for Estuarine wetlands?  The dominant water regime is tidal  The wetland is vegetated  The water salinity is greater than 0.5 ppt	
Yes - Go to SC 1.2	
No - Not an Estuarine Wetland	Result: Not an Estuarine Wetland
SC 1.2 <u>Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, National Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-1513</u>	
Yes - Category I Estuarine Wetland No - Go to SC 1.3	Result:
SC 1.3 Is the wetland unit at least 1ac in size and meets at least two of the following three condition.  The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 10% cover of non-native plant species.  At least 75% of the landward edge of the wetland has a 100ft buffer of shrub, forest, or ungrazed or un-mowed grassland  The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.	ons?
Yes - Category I Estuarine Wetland No - Category II Estuarine Wetland	Result:
SC 2.0 Wetlands of High Conservation Value	
SC 2.1 Does the wetland overlap with any known or historical rare plant or rare & high-quality eco WNHP Data Explorer?	osystem polygons on the
Yes - Category I Wetland of High Conservation Value No - Go to SC 2.2	Result: Go to SC 2.2
SC 2.2 Does the wetland have a rare plant species, rare plant community, or high-quality common may qualify the site as a WHCV?	plant community that
Yes - Category I Wetland of High Conservation Value	
No - Not a Wetland of High Conservation Value	Result: Not a Wetland of High Conservation Value

SC 3.0 Bogs	
SC 3.1 Does an area within the wetland unit have organic soil horizons, either peats or mucks, that	at compose 16in or more
of the first 32in of the soil profile?	
Yes - Go to SC 3.3	
No - Go to SC 3.2	Result: Go to SC 3.3
SC 3.2 Does an area within the wetland unit have organic soils, either peats or mucks, that are less	s 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?
Yes - Go to SC 3.3	
No - Not a Bog Wetland	Result:
SC 3.3 Does an area with peats or mucks have more than 70% cover of mosses at ground level, A	ND at least 30% cover of
plant species listed in the table provided in the instructions?	
Yes - Category I Bog Wetland	
No - Go to SC 3.4	Result: Go to SC 3.4
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, wester	<u>ern red cedar, western</u>
hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of the	
combinations of species) listed in the table found in the instructions provide more than 30% of the	<u>ie cover under the</u>
<u>canopy?</u>	
Yes - Category I Bog Wetland	
No - Not a Bog Wetland	Result: Not a Bog
	Wetland
SC 4.0 Forested Wetlands	
SC 4.1 Does the wetland have at least 1 contiguous acre of forest that meets one of the following	<u>criteria?</u>
Old-growth forests	
Mature forests	
Yes - Category I Forested Wetland	

**Result: Not a Forested** 

Wetland

Wetland name or number: 1

No - Not a Forested Wetland

#### **SC 5.0 Wetlands in Coastal Lagoons**

SC 5.1 Coastal Lagoons: Does the wetland meet all of the following criteria of a wetland in a coast 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 rocks	•
The depression in which the wetland is located contains ponded water that is saline or brackisl	h
(>0.5  ppt) during most of the year in at least a portion of the open water area (measured near the	
bottom)	
bottom)	
Vos. Co to SC F 2	
Yes - Go to SC 5.2	Descrite Net - Countel
No - Not a Coastal Lagoon Wetland	Result: Not a Coastal
	Lagoon Wetland
SC 5.2 Does the wetland meet all of the following three conditions?	
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).	
At least 75% of the landward edge of the wetland has a 100ft buffer of shrub, forest, or un-	
grazed or un-mowed grassland.	
the wetland is larger than 0.10ac (4350 sqft)	
Yes - Category I Coastal Lagoon	
No - Category I Coastal Lagoon	Result:
	Result.
SC 6.0 Interdunal Wetlands	
SC 6.1 Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownersh	ip WBUO)?
Yes - Go to SC 6.2	
	Result: Not an
No - Not an Interdunal Wetland	Interdunal Wetland
	THE CHANGE WELLING
SC 6.2 <u>Is the wetland 1ac or larger in size</u> , or a mosaic that is 1ac or larger in size?	
Wetland is larger than 1ac in size - Go to SC 6.3	
Wetland is a mosaic larger than 1ac is size - Category II Interdunal Wetland	
No - Go to SC 6.4	Result:
SC 6.3 Does the wetland score 8 or 9 points for the habitat functions?	
Yes - Category I Interdunal Wetland	
No - Category II Interdunal Wetland	Result:
SC 6.4 Is the wetland unit between 0.1ac and 1ac, or in a mosaic of wetlands that is between 0.1ac	c and fac in size?
15 the wettand unit between 0.1ac and 1ac, or in a mosaic of wettands that is between 0.1ac	c and tac in SIZE:
Vos. Catagony III Interdunal Wetland	
Yes - Category III Interdunal Wetland	- t
No - Category IV Interdunal Wetland	Result:

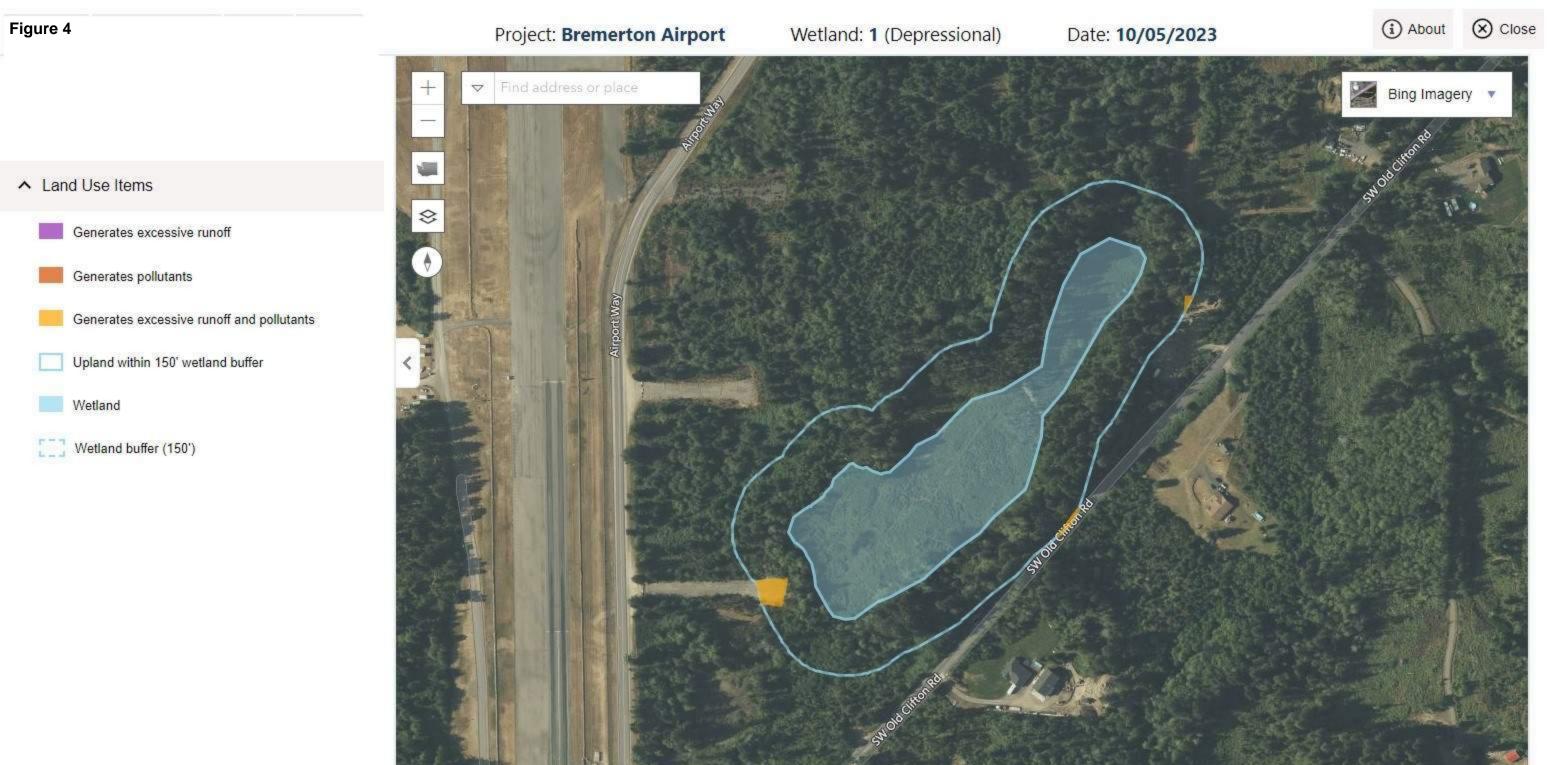
#### **Category of wetland based on Special Characteristics**

If you answered No for all types, enter "Not Applicable" on Summary Form

Final Category: Not Applicable



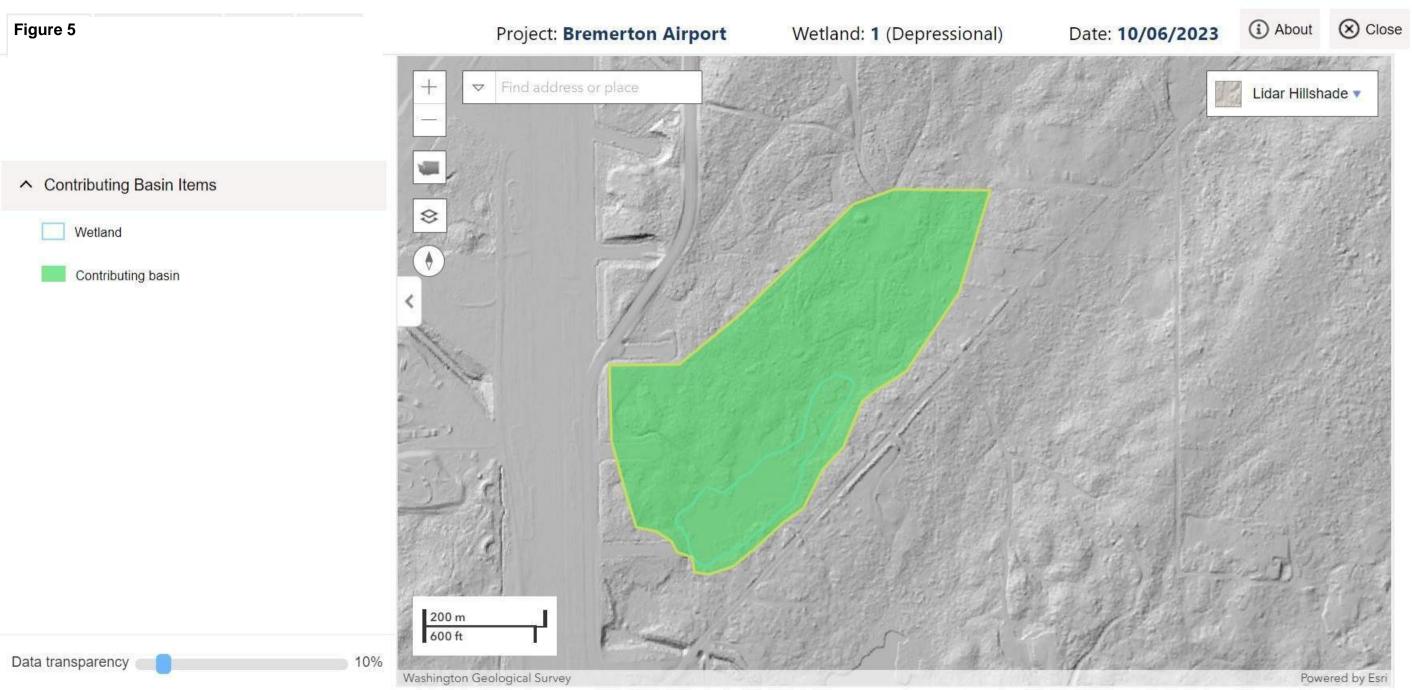




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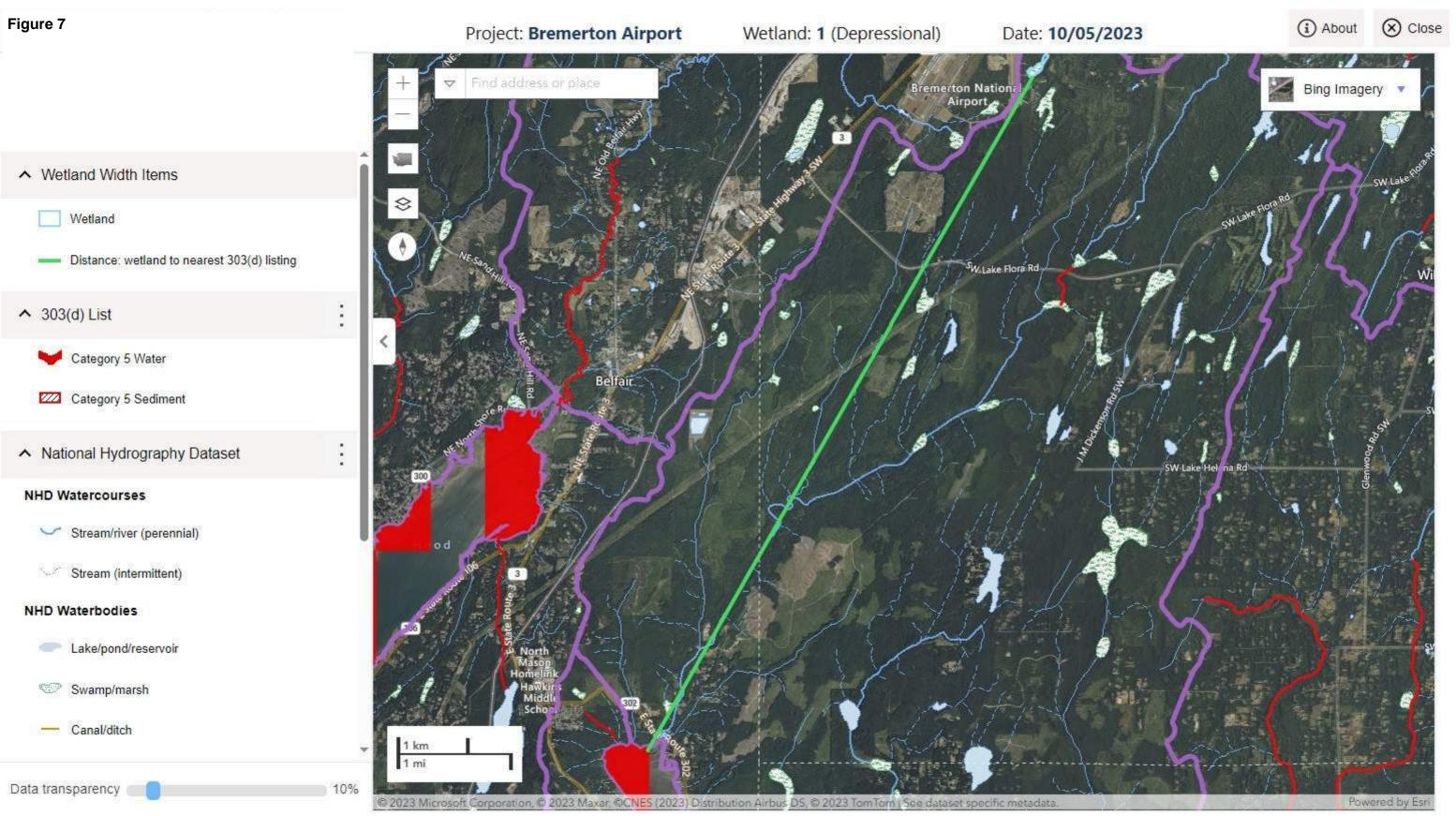
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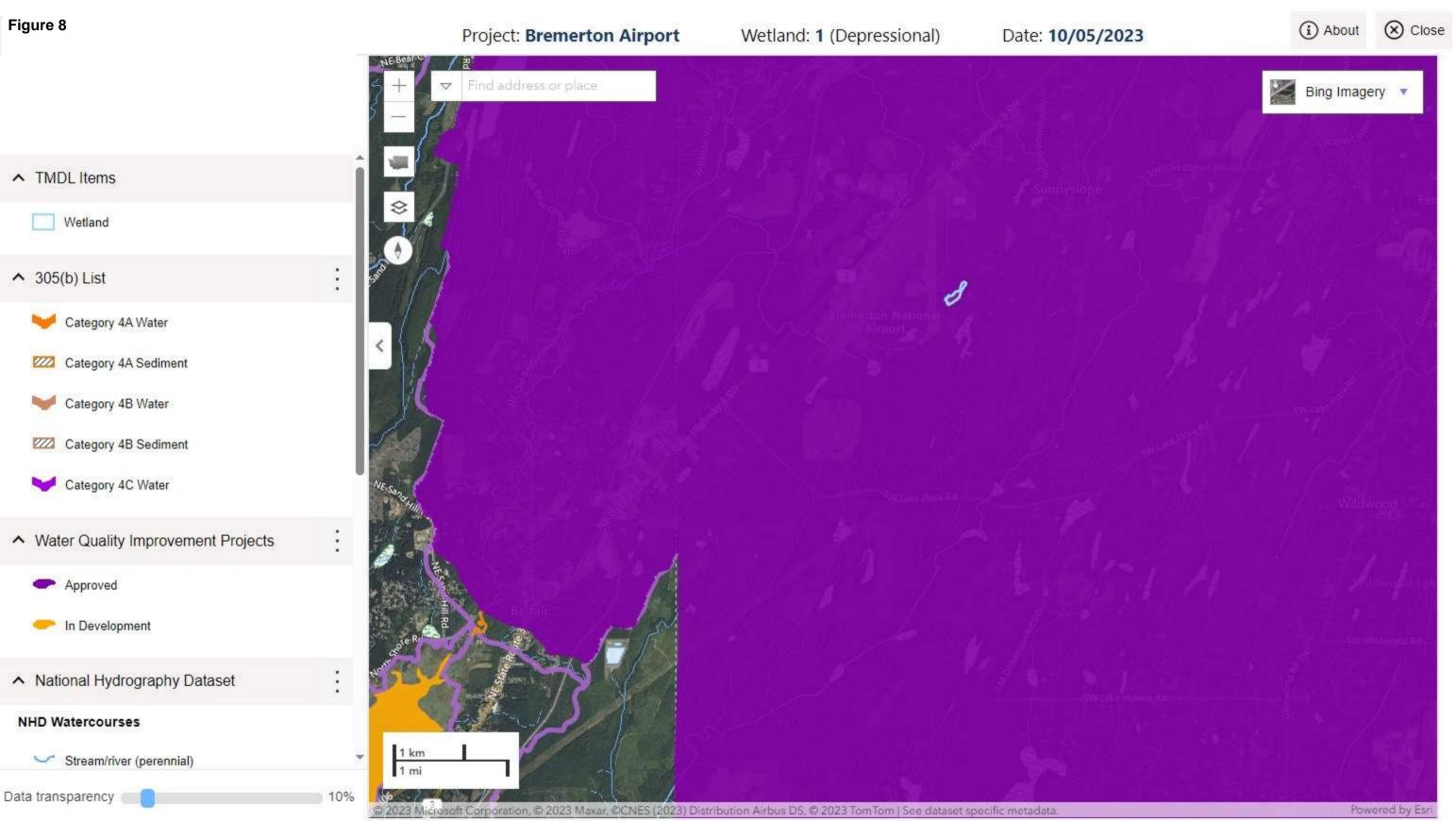


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0.3 km 0.3 mi





### **RATING SUMMARY - Western Washington**

Name of wetland (or ID#): 2 Date of site visit: 10/03/2023

Rated By: Matthew Evinger Trained by Ecology? Yes [X] No [] Date of Training:

06/09/2022

**HGM Class used for rating:** Depressional **Wetland has multiple HGM classes? Yes** [] **No** [X]

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

**OVERALL WETLAND CATEGORY: [Category III]** (based on functions [X] 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

Score Based on Ratings	7	5	7	19
Value	Н	L	M	Total
Landscape Potential	Н	M	Н	
Site Potential	L	M	М	
FUNCTION	Improving Water Quality	Hydrologic	Habitat	

# 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	
Wetland of High Conservation Value	
Bog	
Forested	
Coastal Lagoon	
Interdunal	
None of the above	Not Applicable

#### Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

•		
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	E- <u>3</u> 0
Location of outlet (can be added to map of hydroperiods)	D 1.1, D 4.1	E- <b>3</b> 1
Boundary of area within 150 ft of the wetland (can be added to another figure)	D 2.2, D 5.2	E- <b>4</b> 2
Map of the contributing basin	D 4.3, D 5.3	E- <b>5</b> 3
1km Polygon: Area that extends 1km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	E- <b>9</b> 4
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	E- <b>7</b> 5
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	E-186

#### **DEPRESSIONAL AND FLATS WETLANDS**

Water Quality Functions - Indicators that the site functions to improve water quality

Soil texture identified as clay or organic by laboratory test	points = 4		
Soil texture identified as clay or organic in field  Soil texture identified as clay or organic by laboratory test	points = 4		
None of the above	points = 0	Score:	
D 1.3 What are the characteristics and distribution of persistent plants?	'		
·	points - F		
Wetland has persistent, ungrazed, plants > 95% of area	points = 5		
Wetland has persistent, ungrazed, plants > 50% of area	points = 3		
Wetland has persistent, ungrazed plants > 10% of area	points = 1		
Wetland has persistent, ungrazed plants < 10% of area	points = 0	Score:	
D 1.4 What are the characteristics of seasonal ponding or inundation in the wetland are	a?		
Area seasonally ponded is > 50% total area of wetland	points = 4		
Area seasonally ponded is > 25% total area of wetland	points = 2		
Area seasonally ponded is < 25% total area of wetland	points = 0	Score:	
Area seasonally policed is < 25% total area of Wetland	μοιπια – υ	Jeore.	
	Total for D 1:	5	
Rating of Site Potential [ ] 12-16 = H [ ] 6-11 = M [X] 0-5 = L	Record the rating on t	the first i	מכ

D 2.0 Does the landscape have the potential to support the	water quality function of the site?		
<b>D 2.1</b> Does the wetland unit receive stormwater discharges?			
Yes	points = 1		
No	points = 0	Score:	1
<b>D 2.2</b> Is >10% of the area within 150ft of the wetland in land u	ises that generate pollutants in surface runoff?		
Yes	points = 1		
No	points = 0	Score:	1
<b>D 2.3</b> Are there septic systems within 250ft of the wetland?			
Yes	points = 1		
No	points = 0	Score:	0
D 2.4 Are there other sources of pollutants coming into the we	etland that are not listed in questions D 2.1-D 2.3	?	
Yes	points = 1		
No	points = 0	Score:	1

D 2.5 What are the other sources of pollutants coming into the wetland?	
trash, human waste	
Total for D 2:	3

Rating of Landscape Potential	[X] <b>3-4</b> = <b>H</b> [] <b>1-2</b> = <b>M</b> [] <b>0</b> = <b>L</b>	Reco
-------------------------------	---------------------------------------------------------------------------	------

Record the rating on the first page

D 3.1 Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine	water that is on th	<u>ie 303(d)</u>		
list?				
Yes	points = 1			
No	points = 0	Score:	0	
D 3.2 Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list?				
Yes	points = 1			
No	points = 0	Score:	0	
D 2.2 Has the site been identified in a watershed or local plan as important for maintaining water quality?				

**D 3.3** Has the site been identified in a watershed or local plan as important for maintaining water quality?

Yes points = 2

No points = 0 Score: 2

Total for D 3:

2

**Rating of Value** 

[X] 2-4 = H[] 1 = M[] 0 = L

Record the rating on the first page

#### **DEPRESSIONAL AND FLATS WETLANDS**

**Hydrologic Functions** - Indicators that the site functions to reduce flooding and stream degradtion

#### D 4.0 Does the site have the potential to reduce flooding and erosion?

<b>D 4.1</b> What are the characteristics of surface water outflows from the wetland?		
Wetland has no surface water outlet.	points = 4	
Wetland has an intermittently flowing, or highly constricted, outlet.	points = 2	
Wetland is a flat depression whose outlet is a permanently flowing ditch.	points = 1	
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	Score: 2
D 4.2 What is the depth of storage during the wet periods?		
Marks of ponding are 3ft or more above the surface or bottom of the outlet.	points = 7	
Marks of ponding are between 2ft to <3ft from the surface or bottom of the outlet.	points = 5	
Marks of ponding are at least 0.5ft to <2ft from the surface or the bottom of the outlet.	points = 3	
The wetland is a "headwater" wetland.	points = 3	
The wetland is flat but has small depressions on the surface that trap water.	points = 1	
Marks of ponding are less than 0.5ft (6in).	points = 0	Score: 3

Wetland name or number: 2				
D 4.3 What is the contribution of the	wetland to storage in the watershed?			
The area of the basin is less than 10 t	imes the area of the unit	points = 5		
The area of the basin is 10 to 100 tim	es the area of the unit	points = 3		
The area of the basin is more than 10	0 times the area of the unit	points = 0		
Entire wetland is in the Flats class		points = 5	Score:	3
		Total for D 4:	8	
Rating of Site Potential	[] 12-16 = H [X] 6-11 = M [] 0-5 = L	Record the rating on t	he first p	age
D 5.0 Does the landscape have the	potential to support hydrologic functions of tl	he site?		
<b>D</b> 5.1 <u>Does the wetland unit receive s</u>	stormwater discharges?			
Yes		points = 1		
No		points = 0	Score:	1
<b>D 5.2</b> <u>Is &gt;10% of the area within 150</u>	ft of the wetland in land uses that generate exces	ss runoff?		
Yes		points = 1		
No		points = 0	Score:	1
D 5.3 Is more than 25% of the contrib	outing basin of the wetland covered with intensiv	e human land uses?		
Yes		points = 1		
No		points = 0	Score:	0
		Total for D 5:	2	
Rating of Landscape Potential	[] 3 = H[X] 1-2 = M[] 0 = L	Record the rating on t	the first p	age
D 6.0 Are the hydrologic functions	provided by the site valuable to society?			
D 6.1 Is the wetland in a landscape th	nat has flooding problems?			
Flooding occurs in a sub-basin that is	immediately down-gradient of the wetland.	points = 2		
Surface flooding problems are in a su	b-basin farther down-gradient.	points = 1		
Flooding from groundwater is an issu	e in the basin.	points = 1		
The existing or potential outflow from	n the wetland is so constrained that water	points = 0		
cannot reach areas that flood.		points – o		
There are no problems with flooding	downstream of the wetland.	points = 0	Score:	0
<b>D 6.2</b> Has the site been identified as	important for flood storage or flood conveyance	<u>in a regional flood contro</u>	<u>l plan?</u>	
Yes		points = 2		
No		points = 0	Score:	0
		Total for D 6:	0	

**Rating of Value** 

[] **2-4** = **H**[] **1** = **M**[X] **0** = **L** 

Record the rating on the first page

# **HABITAT FUNCTIONS**

**These questions apply to wetlands of all HGM classes** - Indicators that the site functions to provide important habitat

### H 1.0 Does the wetland have the potential to provide habitat for many species?

H 1.1 What is the structure of the plant community?			
Aquatic Bed			
▼ Emergent			
Scrub-shrub			
Forested			
Multiple strata within the Forested class (canopy, sub-canopy, shrubs, herbaceous,			
moss/ground cover)			
4 structures or more	points = 4		
3 structures	points = 2		
2 structures	points = 1		
1 structure	points = 0		
No structures present	points = 0	Score:	0
H 1.2 What are the hydroperiods that meet the size thresholds in the wetland?			
✓ Permanently flooded or inundated			
✓ Seasonally flooded or inundated			
Occasionally flooded or inundated			
✓ Saturated only			
Permanently flowing stream or river in, or adjacent to, the wetland			
Seasonally flowing stream in, or adjacent to, the wetland			
Lake Fringe wetland			
Freshwater Tidal wetland			
4 or more types present	points = 3		
3 types present or Lake Fringe / Freshwater Tidal Fringe	points = 2		
2 types present	points = 1		
1 type present	points = 0		
None present	points = 0	Score:	2
H 1.3 What is the richness of the plant species in the wetland?			
>19 species	points = 2		
5-19 species	points = 1		
<5 species	points = 0	Score:	1

H 1.4 What is the interspersion of habitats?		
High	points = 3	
Moderate	points = 2	
Low	points = 1	
None	points = 0	Score: 1
H 1.5 What are the special habitat features in the wetland?		
✓ Large, downed, woody debris within the wetland (>4in diameter and 6ft long).		
✓ Standing snags (dbh >4in) within the wetland		
Undercut banks are present for at least 6.6ft (2m) and/or overhanging plants		
extend at least 3.3ft (1m) over open water or a stream (or ditch) in, or contiguous with		
the wetland, for at least 33ft (10m)		
✓ 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 (cut shrubs		
or trees that have not yet weathered where wood is exposed)		
✓ At least 0.25ac of thin-stemmed persistent plants or woody branches are present		
in areas that are permanently or seasonally inundated (structures for egg-laying by		
amphibians)		
Invasive plants cover less than 25% of the wetland area in every stratum of plants		
(see H 1.1 for list of strata)		
6 habitats selected	points = 6	
5 habitats selected	points = 5	
4 habitats selected	points = 4	
3 habitats selected	points = 3	
2 habitats selected	points = 2	
1 habitat selected	points = 1	
No habitats selected	points = 0	Score: 4
	Total for H 1:	8

**Rating of Site Potential** 

[] 15-18 = H [X] 7-14 = M [] 0-6 = L

Record the rating on the first page

# H 2.0 Does the landscape have the potential to support habitat functions of the site?

H 2.1 What is the percentage of accessible habitat within 1km of the wetland?		
>33% of 1km Polygon	points = 3	
20-33% of 1km Polygon	points = 2	
10-19% of 1km Polygon	points = 1	
<10% of 1km Polygon	points = 0	Score: 1
H 2.2 What is the percentage of total habitat in a 1km polygon around the wetland?		
Total habitat is >50% of the Polygon	points = 3	
Total habitat is 10-50% of the Polygon and in 1-3 patches	points = 2	
Total habitat is 10-50% of the Polygon and in >3 patches	points = 1	
Total habitat is <10% of the Polygon	points = 0	Score: 3

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W	/eti	ıand	name	or	num	ner.	/

Trettaria flame of flamber: E				
H 2.3 What is the land use intensity in	the 1km polygon?			
50% of the Polygon is high intensity la	and use	points = -2		
<50% of the Polygon is high intensity	land use	points = 0	Score: (	)
		Total for H 2:	4	
Rating of Landscape Potential	[X] <b>4-6</b> = <b>H</b> [ ] <b>1-3</b> = <b>M</b> [ ] <b>0</b> = <b>L</b>	Record the rating on	the first pa	де

# H 3.0 Is the habitat provided by the site valuable to society?

		Total for H 3:	1	
Th	e site does not meet any of the criteria for societal value	points = 0	Score:	1
	e site has 1 or 2 WDFW priority habitats within 100m	points = 1		
	societal value	•		
Th	e wetland has 3 or more WDFW priority habitats within 100m, or meets the criteria	points = 2		
	The wetland has been categorized as an important habitat site in a local plan			
	The wetland is a Wetland of High Conservation Value			
	The wetland is mapped as a location for an individual WDFW priority species			
	The wetland provides habitat for Threatened or Endangered species			
The	e following criteria automatically score 2 points:			
	Talus			
✓	Snags and Logs			
	Cliffs			
	Caves			
	Nearshore (Coastal, Open Coast, Puget Sound)			
	Instream			
	Fresh Deepwater			
	Westside Prarie			
	Riparian			
	Oregon White Oak			
	Old-growth/Mature Forests			
	Herbaceous Balds			
<b>√</b>	Biodiversity Areas and Corridors			
	Aspen Stands			
н	3.1 Does the site provide habitat for species valued in laws, regulations, or policies?			

**Rating of Value** 

[] 2 = H [X] 1 = M [] 0 = L

Record the rating on the first page

# **CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS**

### **SC 1.0 Estuarine Wetlands**

SC 1.1 Does the wetland meet all of the following criteria for Estuarine wetlands?  The dominant water regime is tidal  The wetland is vegetated  The water salinity is greater than 0.5 ppt	
Yes - Go to SC 1.2	
No - Not an Estuarine Wetland	Result: Not an Estuarine Wetland
SC 1.2 <u>Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, National Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-1513</u>	
Yes - Category I Estuarine Wetland No - Go to SC 1.3	Result:
SC 1.3 Is the wetland unit at least 1ac in size and meets at least two of the following three condition.  The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 10% cover of non-native plant species.  At least 75% of the landward edge of the wetland has a 100ft buffer of shrub, forest, or ungrazed or un-mowed grassland  The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.	ons?
Yes - Category I Estuarine Wetland No - Category II Estuarine Wetland	Result:
SC 2.0 Wetlands of High Conservation Value	
SC 2.1 Does the wetland overlap with any known or historical rare plant or rare & high-quality eco WNHP Data Explorer?	osystem polygons on the
Yes - Category I Wetland of High Conservation Value No - Go to SC 2.2	Result: Go to SC 2.2
SC 2.2 Does the wetland have a rare plant species, rare plant community, or high-quality common may qualify the site as a WHCV?	plant community that
Yes - Category I Wetland of High Conservation Value	
No - Not a Wetland of High Conservation Value	Result: Not a Wetland of High Conservation Value

SC 3.0 Bogs	
SC 3.1 Does an area within the wetland unit have organic soil horizons, either peats or mucks, th	at compose 16in or more
of the first 32in of the soil profile?	
Yes - Go to SC 3.3	
No - Go to SC 3.2	Result: Go to SC 3.2
SC 3.2 Does an area within the wetland unit have organic soils, either peats or mucks, that are le	ss than 16 in deep over
bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a	a lake or pond?
Yes - Go to SC 3.3	
No - Not a Bog Wetland	Result: Not a Bog
Not a bog Welland	Wetland
SC 3.3 Does an area with peats or mucks have more than 70% cover of mosses at ground level, A	AND at least 30% cover of
plant species listed in the table provided in the instructions?	
Yes - Category I Bog Wetland	
No - Go to SC 3.4	Result:
No - Go to SC 3.4  SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, west	
SC 3.4 <u>Is an area with peats or mucks forested (&gt;30% cover) with Sitka spruce, subalpine fir, west hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of the subalpine fir, we say that the subalpine fir is the subalpine fir </u>	tern red cedar, western the species (or
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, west hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of to combinations of species) listed in the table found in the instructions provide more than 30% of the second species	tern red cedar, western the species (or
SC 3.4 <u>Is an area with peats or mucks forested (&gt;30% cover) with Sitka spruce, subalpine fir, west hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of the subalpine fir, we say that the subalpine fir, we say that the subalpine fir, we say the subalpine fir, we say the subalpine fir, we say that the subalpine fir, we say that the subalpine fir, we say that the subalpine fir, we say the subalpine fir, we say that the subalpine fir, we say the subalpine fir, w</u>	tern red cedar, western the species (or
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, west hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of to combinations of species) listed in the table found in the instructions provide more than 30% of the canopy?	tern red cedar, western the species (or
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, west hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of to combinations of species) listed in the table found in the instructions provide more than 30% of the canopy?  Yes - Category I Bog Wetland	tern red cedar, western the species (or the cover under the
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, west hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of to combinations of species) listed in the table found in the instructions provide more than 30% of the canopy?	tern red cedar, western the species (or
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, west hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of to combinations of species) listed in the table found in the instructions provide more than 30% of the canopy?  Yes - Category I Bog Wetland	tern red cedar, western the species (or the cover under the
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, west hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of to combinations of species) listed in the table found in the instructions provide more than 30% of the canopy?  Yes - Category I Bog Wetland  No - Not a Bog Wetland	tern red cedar, western the species (or the cover under the Result:
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, west hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of to combinations of species) listed in the table found in the instructions provide more than 30% of the canopy?  Yes - Category I Bog Wetland No - Not a Bog Wetland  SC 4.0 Forested Wetlands	tern red cedar, western the species (or the cover under the Result:
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, west hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of the combinations of species) listed in the table found in the instructions provide more than 30% of the canopy?  Yes - Category I Bog Wetland No - Not a Bog Wetland  SC 4.0 Forested Wetlands  SC 4.1 Does the wetland have at least 1 contiguous acre of forest that meets one of the following	tern red cedar, western the species (or the cover under the Result:
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, west hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of the combinations of species) listed in the table found in the instructions provide more than 30% of the canopy?  Yes - Category I Bog Wetland No - Not a Bog Wetland  SC 4.0 Forested Wetlands  SC 4.1 Does the wetland have at least 1 contiguous acre of forest that meets one of the following Old-growth forests	tern red cedar, western the species (or the cover under the Result:
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, west hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of the combinations of species) listed in the table found in the instructions provide more than 30% of the canopy?  Yes - Category I Bog Wetland No - Not a Bog Wetland  SC 4.0 Forested Wetlands  SC 4.1 Does the wetland have at least 1 contiguous acre of forest that meets one of the following Old-growth forests	tern red cedar, western the species (or the cover under the Result:

Wetland

Wetland name or number: 2

No - Not a Forested Wetland

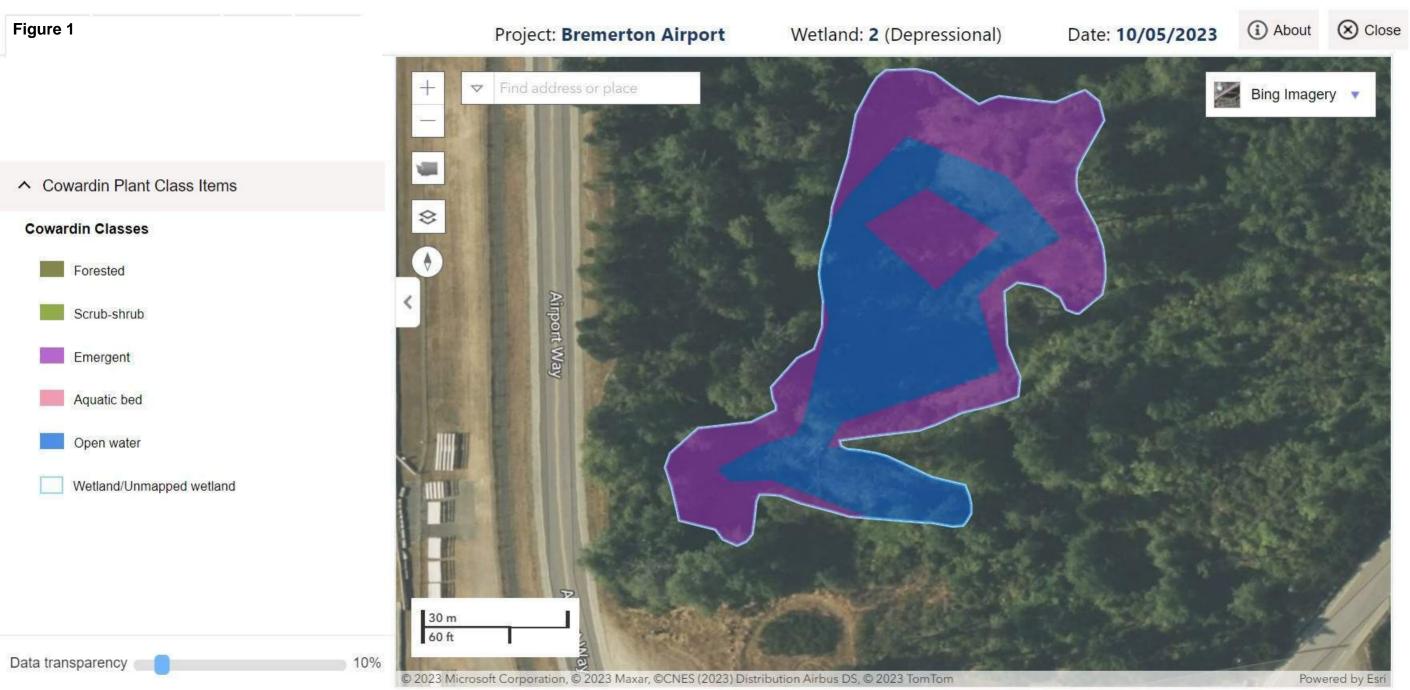
# **SC 5.0 Wetlands in Coastal Lagoons**

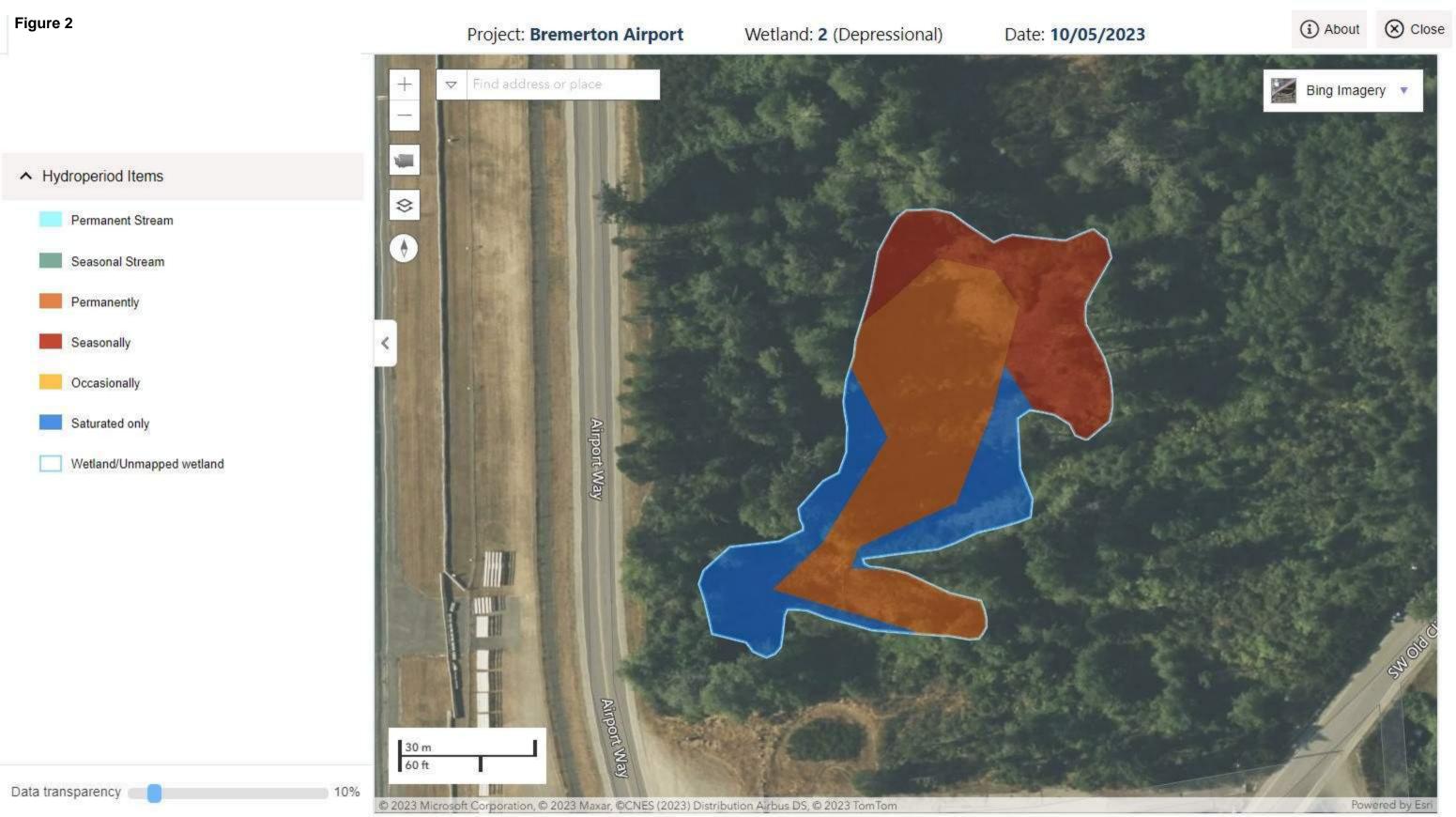
SC 5.1 Coastal Lagoons: Does the wetland meet all of the following criteria of a wetland in a coast The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or rocks	_	
The depression in which the wetland 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 open water area (measured near the		
bottom)		
Van Ca ta 60 F 2		
Yes - Go to SC 5.2		
No - Not a Coastal Lagoon Wetland	Result: Not a Coastal	
3	Lagoon Wetland	
SC 5.2 Does the wetland meet all of the following three conditions?		
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).		
At least 75% of the landward edge of the wetland has a 100ft buffer of shrub, forest, or un-		
grazed or un-mowed grassland.		
the wetland is larger than 0.10ac (4350 sqft)		
the wetland is larger than 0.10ac (4550 sqrt)		
Yes - Category I Coastal Lagoon		
No - Category II Coastal Lagoon	Result:	
SC 6.0 Interdunal Wetlands		
SC 6.1 Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownersh	ip WBUO)?	
	·	
Yes - Go to SC 6.2		
163 60 10 50 0.2	Result: Not an	
No - Not an Interdunal Wetland	Interdunal Wetland	
	interdunai wetiand	
SC 6.2 Is the wetland 1ac or larger in size, or a mosaic that is 1ac or larger in size?		
Wetland is larger than 1ac in size - Go to SC 6.3		
Wetland is a mosaic larger than 1ac is size - Category II Interdunal Wetland		
No - Go to SC 6.4	Result:	
SC 6.3 Does the wetland score 8 or 9 points for the habitat functions?		
2 2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		
Vos. Catagony I Interdunal Watland		
Yes - Category I Interdunal Wetland	Dogults	
No - Category II Interdunal Wetland	Result:	
SC 6.4 Is the wetland unit between 0.1ac and 1ac, or in a mosaic of wetlands that is between 0.1ac	c and 1ac in size?	
Yes - Category III Interdunal Wetland		
No - Category IV Interdunal Wetland	Result:	

# **Category of wetland based on Special Characteristics**

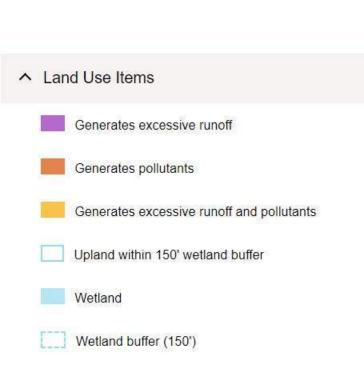
If you answered No for all types, enter "Not Applicable" on Summary Form

Final Category: Not Applicable

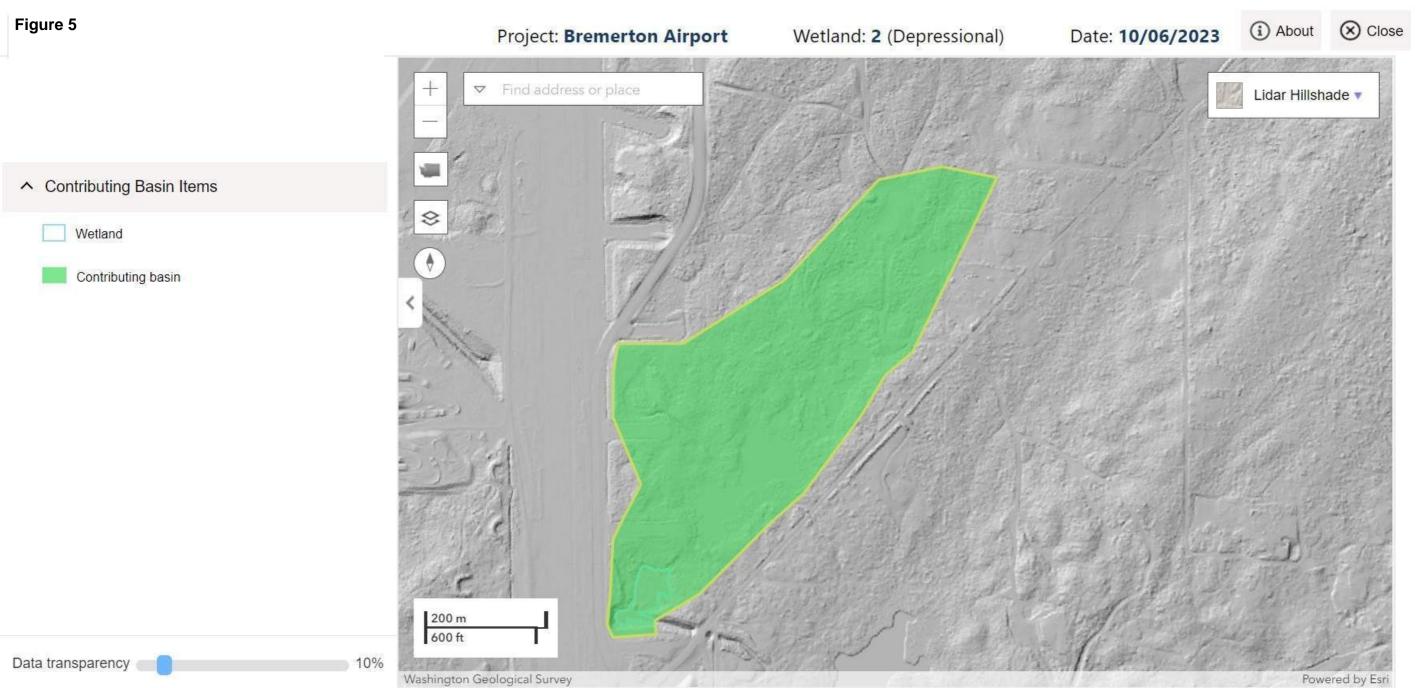












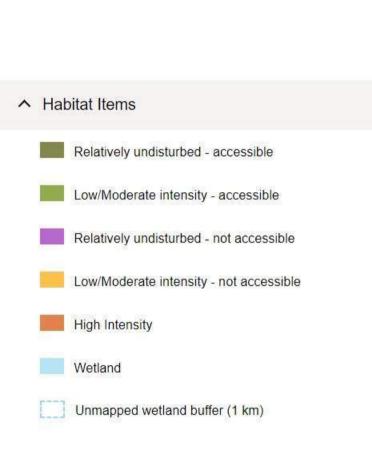
Project: **Bremerton Airport** 

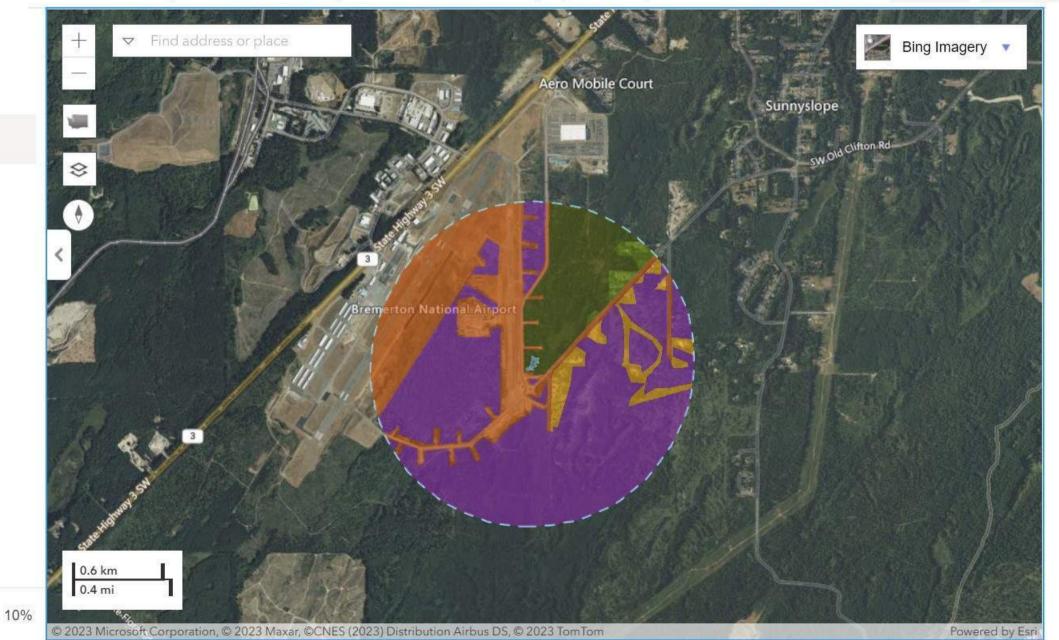
Wetland: 2 (Depressional)

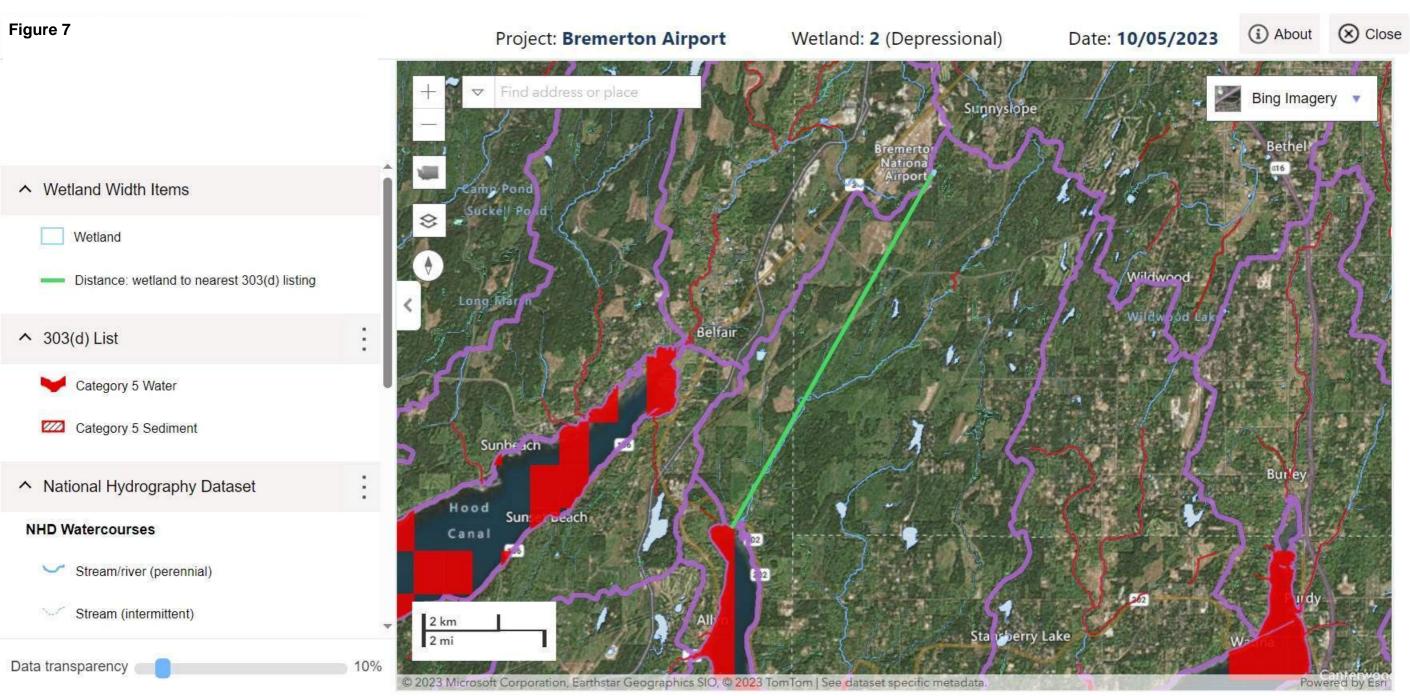
Date: 10/05/2023

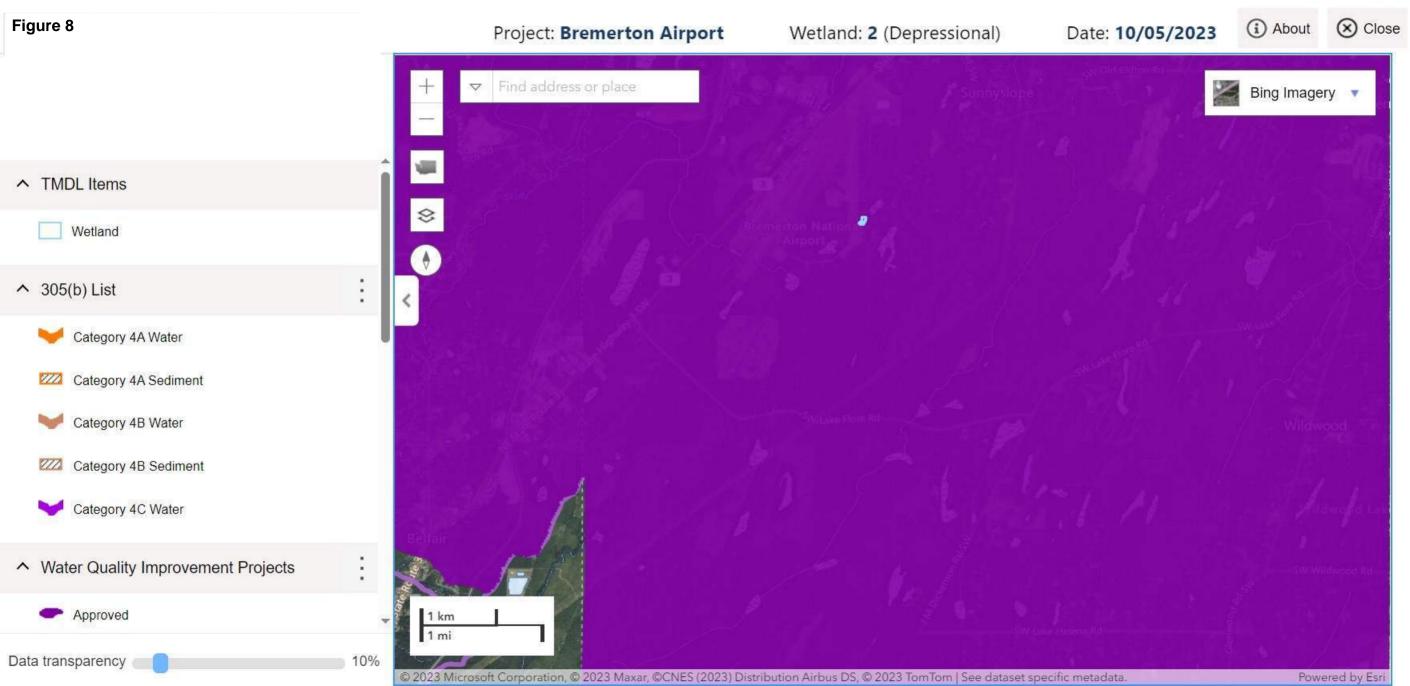
(i) About

⊗ Close









# **RATING SUMMARY - Western Washington**

Name of wetland (or ID#): 3 Date of site visit: 10/10/2023

Rated By: Matthew Evinger Trained by Ecology? Yes [X] No [] Date of Training:

06/09/2022

**HGM Class used for rating:** Depressional **Wetland has multiple HGM classes? Yes** [] **No** [X]

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

**OVERALL WETLAND CATEGORY:** [Category IV] (based on functions [X] 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
- [X] Category IV Total score = 9 15

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
Site Potential	M	М	L	
Landscape Potential	L	L	Н	
Value	Н	L	П	Total
Score Based on Ratings	6	4	5	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	
Wetland of High Conservation Value	
Bog	
Forested	
Coastal Lagoon	
Interdunal	
None of the above	Not Applicable

# Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

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 (can be added to map of hydroperiods)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	D 2.2, D 5.2	
Map of the contributing basin	D 4.3, D 5.3	
1km Polygon: Area that extends 1km 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	

# **DEPRESSIONAL AND FLATS WETLANDS**

Water Quality Functions - Indicators that the site functions to improve water quality

Rating of Site Potential	[] 12-16 = H [X] 6-11 = M [] 0-5 = L	Record the rating on t	he first <u>r</u>	)a
		Total for D 1:	8	
Area seasonally ponded is < 25%	total area of wetland	points = 0	Score:	(
Area seasonally ponded is > 25%	total area of wetland	points = 2		
Area seasonally ponded is > 50%	total area of wetland	points = 4		
<b>D 1.4</b> What are the characteristics	of seasonal ponding or inundation in the wetland	area?		
Wetland has persistent, ungrazed	plants < 10% of area	points = 0	Score:	
Wetland has persistent, ungrazed	plants > 10% of area	points = 1		
Wetland has persistent, ungrazed,	plants > 50% of area	points = 3		
Wetland has persistent, ungrazed,	plants > 95% of area	points = 5		
D 1.3 What are the characteristics	and distribution of persistent plants?			
None of the above		points = 0	Score:	(
Soil texture identified as clay or or	ganic by laboratory test	points = 4		
Soil texture identified as clay or or	ganic in field	points = 4		
Mapped as true clay or organic (m	nuck or peat)	points = 4		
<b>D 1.2</b> Can the soil 2in below the s	urface be identified as true clay or organic soil?			
Wetland is a flat depression whose	e outlet is a permanently flowing ditch.	points = 1	Score:	:
permanently flowing		points = 1		
· ·	slightly constricted, surface outlet that is			
Wetland has an intermittently flow	ring, or highly constricted, outlet.	points = 2		
Wetland has no surface water out	et.	points = 3		
<b>D 1.1</b> What are the characteristics	of surface water outflows from the wetland?			

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	points = 1		
No	points = 0	Score:	0
D 2.2 <u>Is &gt;10% of the area within 150ft of the wetland in land uses that get</u>	nerate pollutants in surface runoff?		
Yes	points = 1		
No	points = 0	Score:	0
D 2.3 Are there septic systems within 250ft of the wetland?			
Yes	points = 1		
No	points = 0	Score:	0
D 2.4 Are there other sources of pollutants coming into the wetland that a	are not listed in questions D 2.1-D 2.3	3?	
Yes	points = 1		
No	points = 0	Score:	0

D 2.5 What are the other sources of po	ollutants coming into the wetland?		
		Total for D 2:	0
Rating of Landscape Potential	[] 3-4 = H[] 1-2 = M[X] 0 = L	Record the rating on the first page	

Rating of Landscape Potential	[ ] 3-4 = H [ ] 1-2 = M [X] 0 = L	Recora the rating on t	tne first po	ge
D 3.0 Is the water quality improvement p	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 marin	ne water that is on th	e 303( <u>d)</u>	
list?				
Yes		points = 1		
No		points = 0	Score:	0
D 3.2 Is the wetland in a basin or sub-basin	where an aquatic resource is on the 303(d) list	?		
Yes		points = 1		
No		points = 0	Score:	1
D 3.3 Has the site been identified in a water	rshed or local plan as important for maintaining	<u>water quality?</u>		
Yes		points = 2		
No		points = 0	Score:	2
		Total for D 3:	3	

**Rating of Value** 

[X] **2-4** = **H** [ ] **1** = **M** [ ] **0** = **L** 

Record the rating on the first page

# **DEPRESSIONAL AND FLATS WETLANDS**

**Hydrologic Functions** - Indicators that the site functions to reduce flooding and stream degradtion

### D 4.0 Does the site have the potential to reduce flooding and erosion?

<b>D 4.1</b> What are the characteristics of surface water outflows from the wetland?		
Wetland has no surface water outlet.	points = 4	
Wetland has an intermittently flowing, or highly constricted, outlet.	points = 2	
Wetland is a flat depression whose outlet is a permanently flowing ditch.	points = 1	
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	Score: 4
D 4.2 What is the depth of storage during the wet periods?		
Marks of ponding are 3ft or more above the surface or bottom of the outlet.	points = 7	
Marks of ponding are between 2ft to <3ft from the surface or bottom of the outlet.	points = 5	
Marks of ponding are at least 0.5ft to <2ft from the surface or the bottom of the outlet.	points = 3	
The wetland is a "headwater" wetland.	points = 3	
The wetland is flat but has small depressions on the surface that trap water.	points = 1	
Marks of ponding are less than 0.5ft (6in).	points = 0	Score: 0

Wetland name or number: 3				
D 4.3 What is the contribution of the	wetland to storage in the watershed?			
The area of the basin is less than 10 t	imes the area of the unit	points = 5		
The area of the basin is 10 to 100 time	es the area of the unit	points = 3		
The area of the basin is more than 10	0 times the area of the unit	points = 0		
Entire wetland is in the Flats class		points = 5	Score:	3
		Total for D 4:	7	
Rating of Site Potential	[] 12-16 = H [X] 6-11 = M [] 0-5 = L	Record the rating on t	the first p	age
D 5.0 Does the landscape have the	potential to support hydrologic functions of t	he site?		
D 5.1 Does the wetland unit receive s	stormwater discharges?			
Yes		points = 1		
No		points = 0	Score:	0
<b>D 5.2</b> <u>Is &gt;10% of the area within 150</u>	ft of the wetland in land uses that generate exce	ss runoff?		
Yes		points = 1		
No		points = 0	Score:	0
D 5.3 Is more than 25% of the contri	outing basin of the wetland covered with intensiv	ve human land uses?		
Yes		points = 1		
No		points = 0	Score:	0
		Total for D 5:	0	
Rating of Landscape Potential	[] 3 = H[] 1-2 = M[X] 0 = L	Record the rating on t	the first p	аде
D 6.0 Are the hydrologic functions	provided by the site valuable to society?			
D 6.1 Is the wetland in a landscape the	nat has flooding problems?			
Flooding occurs in a sub-basin that is	immediately down-gradient of the wetland.	points = 2		
Surface flooding problems are in a su	ıb-basin farther down-gradient.	points = 1		
Flooding from groundwater is an issu	e in the basin.	points = 1		
The existing or potential outflow from	n the wetland is so constrained that water	points = 0		
cannot reach areas that flood.		points – o		
There are no problems with flooding	downstream of the wetland.	points = 0	Score:	0
<b>D 6.2</b> Has the site been identified as	<u>important for flood storage or flood conveyance</u>	in a regional flood contro	ol plan?	
Yes		points = 2		
No		points = 0	Score:	0
		Total for D 6:	0	

**Rating of Value** 

[] **2-4** = **H**[] **1** = **M**[X] **0** = **L** 

Record the rating on the first page

# **HABITAT FUNCTIONS**

**These questions apply to wetlands of all HGM classes** - Indicators that the site functions to provide important habitat

### H 1.0 Does the wetland have the potential to provide habitat for many species?

H 1.1 What is the structure of the plant community?			
Aquatic Bed			
Emergent			
✓ Scrub-shrub			
Forested			
Multiple strata within the Forested class (canopy, sub-canopy, shrubs, herbaceous,			
moss/ground cover)			
4 structures or more	points = 4		
3 structures	points = 2		
2 structures	points = 1		
1 structure	points = 0		
No structures present	points = 0	Score:	0
H 1.2 What are the hydroperiods that meet the size thresholds in the wetland?			
Permanently flooded or inundated			
Seasonally flooded or inundated			
Occasionally flooded or inundated			
Saturated only			
Permanently flowing stream or river in, or adjacent to, the wetland			
Seasonally flowing stream in, or adjacent to, the wetland			
Lake Fringe wetland			
Freshwater Tidal wetland			
4 or more types present	points = 3		
3 types present or Lake Fringe / Freshwater Tidal Fringe	points = 2		
2 types present	points = 1		
1 type present	points = 0		
None present	points = 0	Score:	0
H 1.3 What is the richness of the plant species in the wetland?			
>19 species	points = 2		
5-19 species	points = 1		
<5 species	points = 0	Score:	1

H 1.4 What is the interspersion of habitats?		
High	points = 3	
Moderate	points = 2	
Low	points = 1	
None	points = 0	Score: 0
H 1.5 What are the special habitat features in the wetland?		
Large, downed, woody debris within the wetland (>4in diameter and 6ft long).		
Standing snags (dbh >4in) within the wetland		
Undercut banks are present for at least 6.6ft (2m) and/or overhanging plants		
extend at least 3.3ft (1m) over open water or a stream (or ditch) in, or contiguous with		
the wetland, for at least 33ft (10m)		
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 (cut shrubs		
or trees that have not yet weathered where wood is exposed)		
At least 0.25ac of thin-stemmed persistent plants or woody branches are present		
in areas that are permanently or seasonally inundated (structures for egg-laying by		
amphibians)		
Invasive plants cover less than 25% of the wetland area in every stratum of plants		
(see H 1.1 for list of strata)		
6 habitats selected	points = 6	
5 habitats selected	points = 5	
4 habitats selected	points = 4	
3 habitats selected	points = 3	
2 habitats selected	points = 2	
1 habitat selected	points = 1	
No habitats selected	points = 0	Score: 0
	Total for H 1:	1

**Rating of Site Potential** 

[] 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 habitat functions of the site?

H 2.1 What is the percentage of accessible habitat within 1km of the wetland?		
>33% of 1km Polygon	points = 3	
20-33% of 1km Polygon	points = 2	
10-19% of 1km Polygon	points = 1	
<10% of 1km Polygon	points = 0	Score: 1
H 2.2 What is the percentage of total habitat in a 1km polygon around the wetland?		
Total habitat is >50% of the Polygon	points = 3	
Total habitat is 10-50% of the Polygon and in 1-3 patches	points = 2	
Total habitat is 10-50% of the Polygon and in >3 patches	points = 1	
Total habitat is <10% of the Polygon	points = 0	Score: 3

		_
Watland	name or numb	or. 2

H 2.3 What is the land use intensity in the 1km polygon?		
50% of the Polygon is high intensity land use points = -2		
<50% of the Polygon is high intensity land use points = 0	Score:	0
Total for H 2:	4	

**Rating of Landscape Potential** 

[X] **4-6** = **H** [ ] **1-3** = **M** [ ] **0** = **L** 

Record the rating on the first page

# H 3.0 Is the habitat provided by the site valuable to society?

H 3.1 Does the site provide habitat for species valued in laws, regulations, or policies?		
Aspen Stands		
Biodiversity Areas and Corridors		
Herbaceous Balds		
Old-growth/Mature Forests		
Oregon White Oak		
Riparian		
Westside Prarie		
Fresh Deepwater		
Instream		
Nearshore (Coastal, Open Coast, Puget Sound)		
Caves		
Cliffs		
Snags and Logs		
Talus		
The following criteria automatically score 2 points:		
The wetland provides habitat for Threatened or Endangered species		
The wetland is mapped as a location for an individual WDFW priority species		
The wetland is a Wetland of High Conservation Value		
The wetland has been categorized as an important habitat site in a local plan		
The wetland has 3 or more WDFW priority habitats within 100m, or meets the criteria		
for societal value		
The site has 1 or 2 WDFW priority habitats within 100m points = 1		
The site does not meet any of the criteria for societal value points = 0	Score:	0
Total for H 3:	0	

**Rating of Value** 

[] 2 = H[] 1 = M[X] 0 = L

Record the rating on the first page

# **CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS**

### **SC 1.0 Estuarine Wetlands**

SC 1.1 Does the wetland meet all of the following criteria for Estuarine wetlands?  The dominant water regime is tidal  The wetland is vegetated  The water salinity is greater than 0.5 ppt	
Yes - Go to SC 1.2	Result: Not an
No - Not an Estuarine Wetland	Estuarine Wetland
SC 1.2 Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, National Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-1513	
Yes - Category I Estuarine Wetland No - Go to SC 1.3	Result:
SC 1.3 Is the wetland unit at least 1ac in size and meets at least two of the following three condition. The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 10% cover of non-native plant species.  At least 75% of the landward edge of the wetland has a 100ft buffer of shrub, forest, or ungrazed or un-mowed grassland  The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.	ons?
Yes - Category I Estuarine Wetland No - Category II Estuarine Wetland	Result:
SC 2.0 Wetlands of High Conservation Value	
SC 2.1 Does the wetland overlap with any known or historical rare plant or rare & high-quality eco WNHP Data Explorer?	osystem polygons on the
Yes - Category I Wetland of High Conservation Value No - Go to SC 2.2	Result: Go to SC 2.2
SC 2.2 Does the wetland have a rare plant species, rare plant community, or high-quality common may qualify the site as a WHCV?	plant community that
Yes - Category I Wetland of High Conservation Value	
No - Not a Wetland of High Conservation Value	Result: Not a Wetland of High Conservation Value

SC 3.0 Bogs	
SC 3.1 Does an area within the wetland unit have organic soil horizons, either peats or mucks, the	at compose 16in or more
of the first 32in of the soil profile?	
Yes - Go to SC 3.3	
No - Go to SC 3.2	Result: Go to SC 3.2
SC 3.2 Does an area within the wetland unit have organic soils, either peats or mucks, that are le	ss than 16 in deep over
bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a	a lake or pond?
Yes - Go to SC 3.3	
No - Not a Bog Wetland	Result: Not a Bog
Two Two a bog wettand	Wetland
SC 3.3 Does an area with peats or mucks have more than 70% cover of mosses at ground level, A	AND at least 30% cover of
plant species listed in the table provided in the instructions?	
Yes - Category I Bog Wetland	
res - Category i Bog Wetland	
No - Go to SC 3.4	Result:
No - Go to SC 3.4  SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, wes hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of sites.	tern red cedar, western the species (or
No - Go to SC 3.4  SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, wes hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of combinations of species) listed in the table found in the instructions provide more than 30% of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine fir, western white pine fir, western white pine fir, we subalpine	tern red cedar, western the species (or
No - Go to SC 3.4  SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, wes hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of sites.	tern red cedar, western the species (or
No - Go to SC 3.4  SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, wes hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of combinations of species) listed in the table found in the instructions provide more than 30% of to canopy?	tern red cedar, western the species (or
No - Go to SC 3.4  SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, wes hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of combinations of species) listed in the table found in the instructions provide more than 30% of to canopy?  Yes - Category I Bog Wetland	tern red cedar, western the species (or he cover under the
No - Go to SC 3.4  SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, wes hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of combinations of species) listed in the table found in the instructions provide more than 30% of to canopy?	tern red cedar, western the species (or
No - Go to SC 3.4  SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, wes hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of combinations of species) listed in the table found in the instructions provide more than 30% of to canopy?  Yes - Category I Bog Wetland	tern red cedar, western the species (or he cover under the
No - Go to SC 3.4  SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, wes hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of combinations of species) listed in the table found in the instructions provide more than 30% of to canopy?  Yes - Category I Bog Wetland No - Not a Bog Wetland	tern red cedar, western the species (or he cover under the  Result:
No - Go to SC 3.4  SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, wes hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of combinations of species) listed in the table found in the instructions provide more than 30% of to canopy?  Yes - Category I Bog Wetland No - Not a Bog Wetland  SC 4.0 Forested Wetlands	tern red cedar, western the species (or he cover under the  Result:
No - Go to SC 3.4  SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, wes hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of combinations of species) listed in the table found in the instructions provide more than 30% of total canopy?  Yes - Category I Bog Wetland No - Not a Bog Wetland  SC 4.0 Forested Wetlands  SC 4.1 Does the wetland have at least 1 contiguous acre of forest that meets one of the following	tern red cedar, western the species (or he cover under the  Result:
No - Go to SC 3.4  SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, wes hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of combinations of species) listed in the table found in the instructions provide more than 30% of to canopy?  Yes - Category I Bog Wetland No - Not a Bog Wetland  SC 4.0 Forested Wetlands  SC 4.1 Does the wetland have at least 1 contiguous acre of forest that meets one of the followin Old-growth forests	tern red cedar, western the species (or he cover under the  Result:
No - Go to SC 3.4  SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, wes hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of combinations of species) listed in the table found in the instructions provide more than 30% of to canopy?  Yes - Category I Bog Wetland No - Not a Bog Wetland  SC 4.0 Forested Wetlands  SC 4.1 Does the wetland have at least 1 contiguous acre of forest that meets one of the followin Old-growth forests	tern red cedar, western the species (or he cover under the  Result:

Wetland

Wetland name or number: 3

No - Not a Forested Wetland

# **SC 5.0 Wetlands in Coastal Lagoons**

SC 5.1 Coastal Lagoons: Does the wetland meet all of the following criteria of a wetland in a coast 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 rocks	•
The depression in which the wetland is located contains ponded water that is saline or brackisl	h
(>0.5  ppt) during most of the year in at least a portion of the open water area (measured near the	
bottom)	
bottom)	
Vos. Co to SC F 2	
Yes - Go to SC 5.2	Descrite Net - Countel
No - Not a Coastal Lagoon Wetland	Result: Not a Coastal
	Lagoon Wetland
SC 5.2 Does the wetland meet all of the following three conditions?	
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).	
At least 75% of the landward edge of the wetland has a 100ft buffer of shrub, forest, or un-	
grazed or un-mowed grassland.	
the wetland is larger than 0.10ac (4350 sqft)	
Yes - Category I Coastal Lagoon	
No - Category I Coastal Lagoon	Result:
	Result.
SC 6.0 Interdunal Wetlands	
SC 6.1 Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownersh	ip WBUO)?
Yes - Go to SC 6.2	
	Result: Not an
No - Not an Interdunal Wetland	Interdunal Wetland
	THE CHANGE WELLING
SC 6.2 <u>Is the wetland 1ac or larger in size</u> , or a mosaic that is 1ac or larger in size?	
Wetland is larger than 1ac in size - Go to SC 6.3	
Wetland is a mosaic larger than 1ac is size - Category II Interdunal Wetland	
No - Go to SC 6.4	Result:
SC 6.3 Does the wetland score 8 or 9 points for the habitat functions?	
Yes - Category I Interdunal Wetland	
No - Category II Interdunal Wetland	Result:
SC 6.4 Is the wetland unit between 0.1ac and 1ac, or in a mosaic of wetlands that is between 0.1ac	c and fac in size?
15 the wettand unit between 0.1ac and 1ac, or in a mosaic of wettands that is between 0.1ac	c and tac in SIZE!
Vos. Catagony III Interdunal Wetland	
Yes - Category III Interdunal Wetland	- t
No - Category IV Interdunal Wetland	Result:

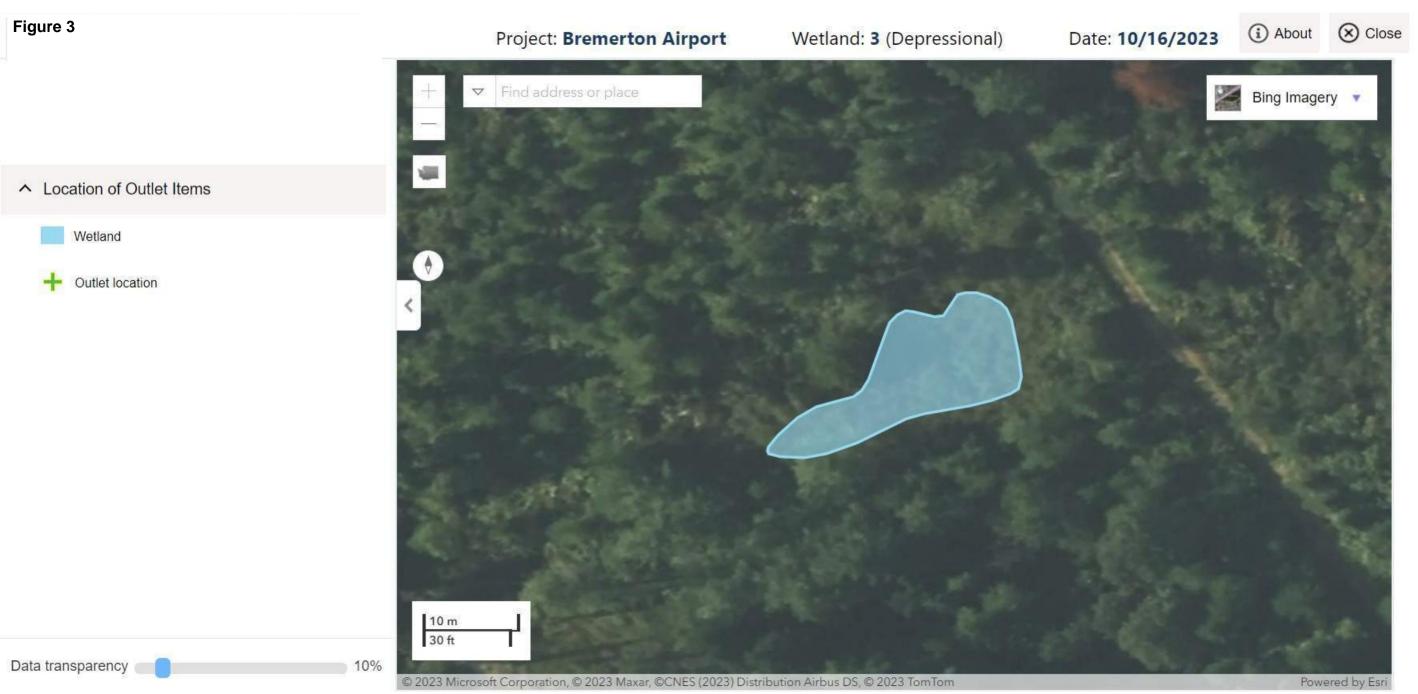
# **Category of wetland based on Special Characteristics**

If you answered No for all types, enter "Not Applicable" on Summary Form

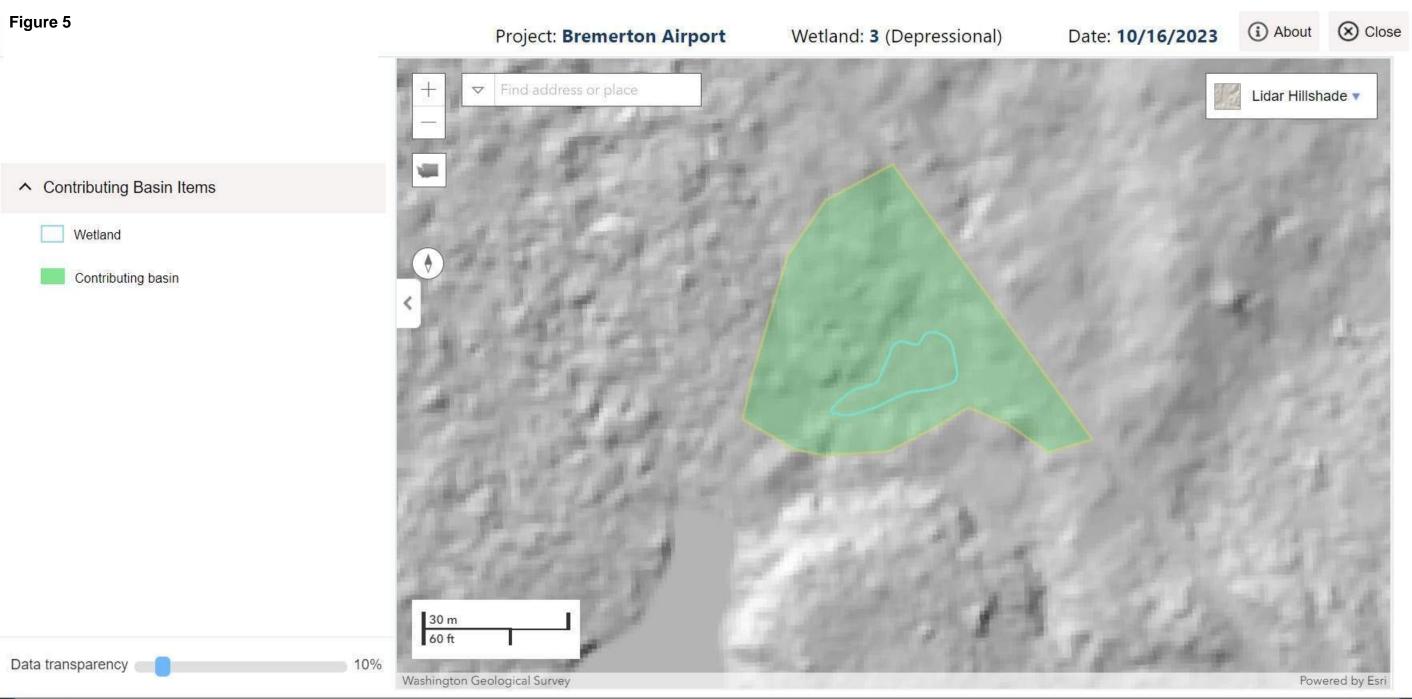
Final Category: Not Applicable



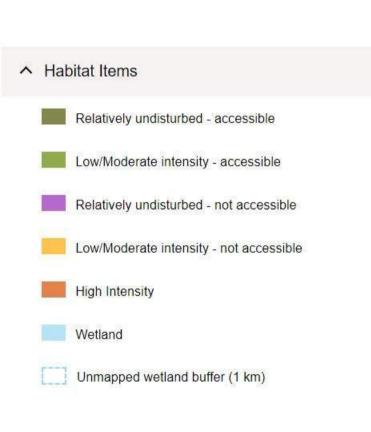


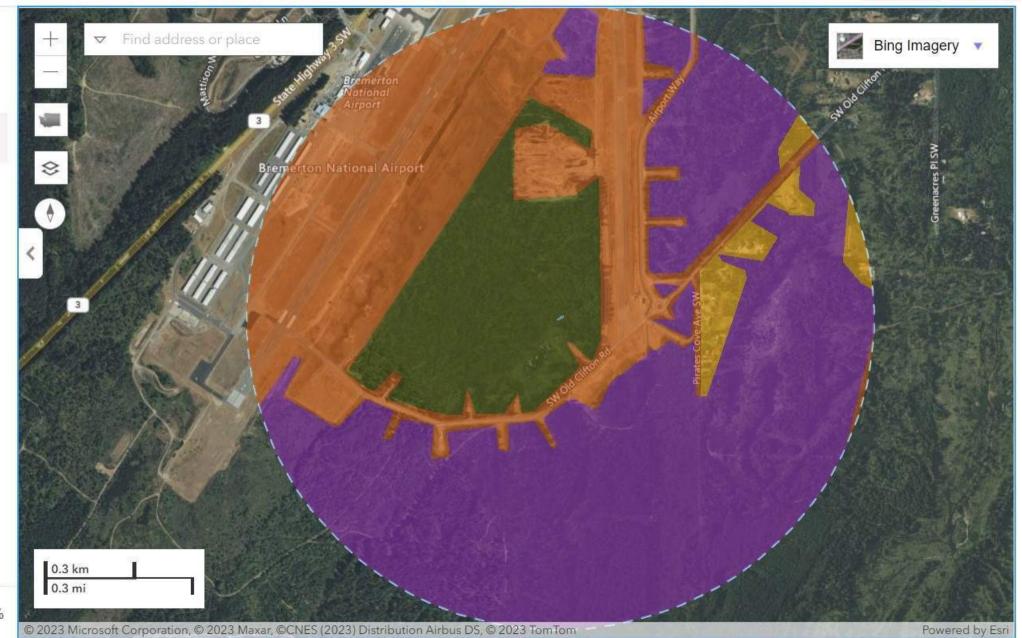


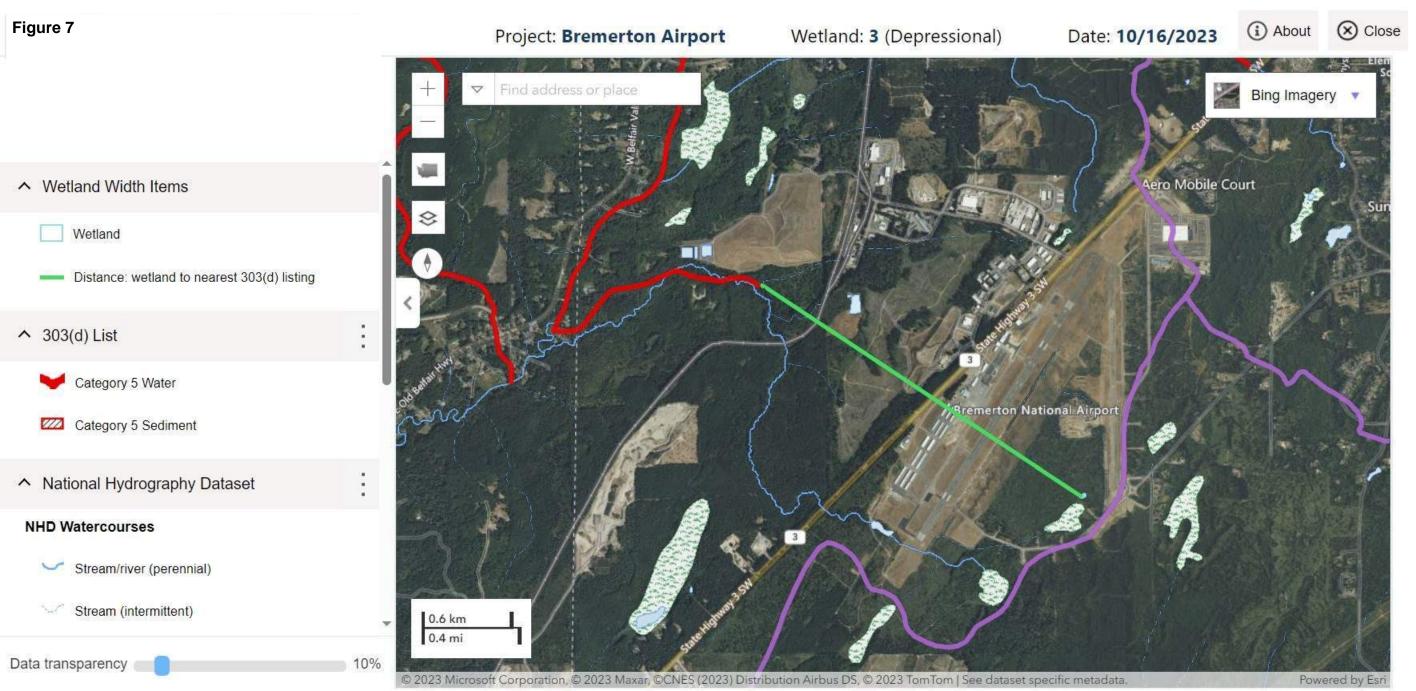


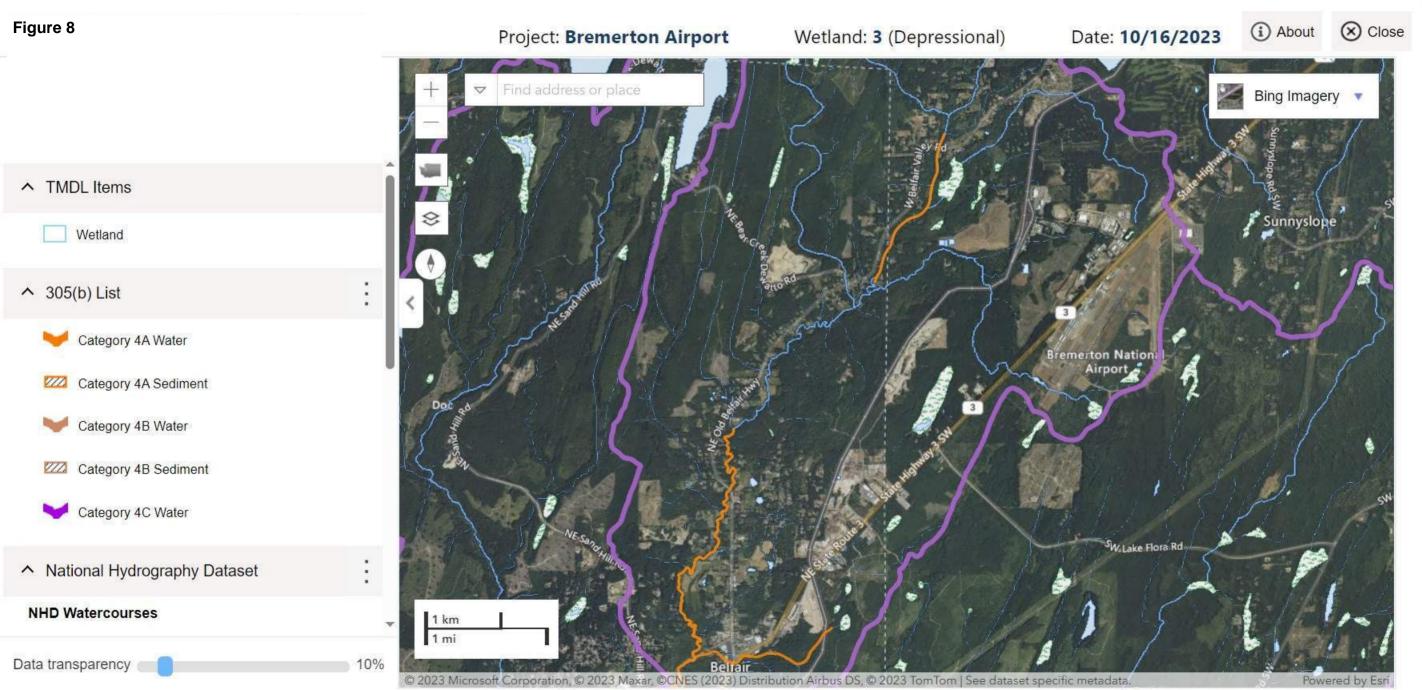


Data transparency









# **RATING SUMMARY - Western Washington**

Name of wetland (or ID#): 4 Date of site visit: 10/10/2023

Rated By: Matthew Evinger Trained by Ecology? Yes [X] No [] Date of Training:

06/09/2022

**HGM Class used for rating:** Depressional **Wetland has multiple HGM classes? Yes** [] **No** [X]

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

Source of base aerial photo/map:

**OVERALL WETLAND CATEGORY:** [Category II] (based on functions [X] 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	
Site Potential	М	М	М	
Landscape Potential	M	М	Н	
Value	Н	L	Н	Total
Score Based on Ratings	7	5	8	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	
Wetland of High Conservation Value	
Bog	
Forested	
Coastal Lagoon	
Interdunal	
None of the above	Not Applicable

# Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

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 (can be added to map of hydroperiods)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	D 2.2, D 5.2	
Map of the contributing basin	D 4.3, D 5.3	
1km Polygon: Area that extends 1km 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	

# **DEPRESSIONAL AND FLATS WETLANDS**

Water Quality Functions - Indicators that the site functions to improve water quality

D 1.1 What are the characteristics of surface water outflows from the wetland?  Wetland has no surface water outlet.  Wetland has an intermittently flowing, or highly constricted, outlet.  Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing  Wetland is a flat depression whose outlet is a permanently flowing ditch.  D 1.2 Can the soil 2in below the surface be identified as true clay or organic soil?  Mapped as true clay or organic (muck or peat)  Soil texture identified as clay or organic by laboratory test  None of the above  D 1.3 What are the characteristics and distribution of persistent plants?  Wetland has persistent, ungrazed, plants > 95% of area	points = 3 points = 2  points = 1  points = 1  points = 4 points = 4 points = 4 points = 4 points = 0	Score:	
Wetland has an intermittently flowing, or highly constricted, outlet.  Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing  Wetland is a flat depression whose outlet is a permanently flowing ditch.  D 1.2 Can the soil 2in below the surface be identified as true clay or organic soil?  Mapped as true clay or organic (muck or peat)  Soil texture identified as clay or organic in field  Soil texture identified as clay or organic by laboratory test  None of the above  D 1.3 What are the characteristics and distribution of persistent plants?	points = 2  points = 1  points = 1  points = 4  points = 4  points = 4		
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing Wetland is a flat depression whose outlet is a permanently flowing ditch.  D 1.2 Can the soil 2in below the surface be identified as true clay or organic soil?  Mapped as true clay or organic (muck or peat)  Soil texture identified as clay or organic in field Soil texture identified as clay or organic by laboratory test None of the above  D 1.3 What are the characteristics and distribution of persistent plants?	points = 1  points = 1  points = 4  points = 4  points = 4		
permanently flowing Wetland is a flat depression whose outlet is a permanently flowing ditch.  D 1.2 Can the soil 2in below the surface be identified as true clay or organic soil?  Mapped as true clay or organic (muck or peat)  Soil texture identified as clay or organic in field Soil texture identified as clay or organic by laboratory test None of the above  D 1.3 What are the characteristics and distribution of persistent plants?	points = 1  points = 4  points = 4  points = 4		
D 1.2 Can the soil 2in below the surface be identified as true clay or organic soil?  Mapped as true clay or organic (muck or peat)  Soil texture identified as clay or organic in field  Soil texture identified as clay or organic by laboratory test  None of the above  D 1.3 What are the characteristics and distribution of persistent plants?	points = 4 points = 4 points = 4		
Mapped as true clay or organic (muck or peat)  Soil texture identified as clay or organic in field  Soil texture identified as clay or organic by laboratory test  None of the above  D 1.3 What are the characteristics and distribution of persistent plants?	points = 4 points = 4	Score:	4
Soil texture identified as clay or organic in field  Soil texture identified as clay or organic by laboratory test  None of the above  D 1.3 What are the characteristics and distribution of persistent plants?	points = 4 points = 4	Score:	4
Soil texture identified as clay or organic by laboratory test  None of the above  D 1.3 What are the characteristics and distribution of persistent plants?	points = 4	Score:	4
None of the above  D 1.3 What are the characteristics and distribution of persistent plants?	•	Score:	4
<b>D 1.3</b> What are the characteristics and distribution of persistent plants?	points = 0	Score:	4
·			
Wetland has persistent, ungrazed, plants > 95% of area			
	points = 5		
Wetland has persistent, ungrazed, plants > 50% of area	points = 3		
Wetland has persistent, ungrazed plants > 10% of area	points = 1		
Wetland has persistent, ungrazed plants < 10% of area	points = 0	Score:	3
D 1.4 What are the characteristics of seasonal ponding or inundation in the wetland a	area?		
Area seasonally ponded is > 50% total area of wetland	points = 4		
Area seasonally ponded is > 25% total area of wetland	points = 2		
Area seasonally ponded is < 25% total area of wetland	points = 0	Score:	2
	Total for D 1:	11	
Rating of Site Potential [] 12-16 = H [X] 6-11 = M [] 0-5 = L	Record the rating on	the first p	aç

D 2.0 Does the landscape have the potential to support the w	vater quality function of the site?		
<b>D 2.1</b> Does the wetland unit receive stormwater discharges?			
Yes	points = 1		
No	points = 0	Score:	1
<b>D 2.2</b> Is >10% of the area within 150ft of the wetland in land use	es that generate pollutants in surface runoff?		
Yes	points = 1		
No	points = 0	Score:	0
<b>D 2.3</b> Are there septic systems within 250ft of the wetland?			
Yes	points = 1		
No	points = 0	Score:	0
D 2.4 Are there other sources of pollutants coming into the wetla	and that are not listed in questions D 2.1-D 2.3	3?	
Yes	points = 1		
No	points = 0	Score:	1

<b>D 2.5</b> What are the other sources of pollutants coming into the wetland? waterfowl		
Total for D 2:	2	

Rating of Landscape Potential [] 3-4 = H [X] 1-2 = M [] 0 = L Record

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 points = 1	
No points = 0	Score: (

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

Yes points = 1

No points = 0 Score: 1

D 3.3 Has the site been identified in a watershed or local plan as important for maintaining water quality?

Yes points = 2

No points = 0 Score: 2

Total for D 3:

3

0

**Rating of Value** 

[X] 2-4 = H[] 1 = M[] 0 = L

Record the rating on the first page

# **DEPRESSIONAL AND FLATS WETLANDS**

**Hydrologic Functions** - Indicators that the site functions to reduce flooding and stream degradtion

## D 4.0 Does the site have the potential to reduce flooding and erosion?

	D 4.1 What are the characteristics of surface water outflows from the wetland?		
	Wetland has no surface water outlet.	points = 4	
	Wetland has an intermittently flowing, or highly constricted, outlet.	points = 2	
	Wetland is a flat depression whose outlet is a permanently flowing ditch.	points = 1	
	Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	Score: 2
	D 4.2 What is the depth of storage during the wet periods?		
	Marks of ponding are 3ft or more above the surface or bottom of the outlet.	points = 7	
	Marks of ponding are between 2ft to <3ft from the surface or bottom of the outlet.	points = 5	
<	Marks of ponding are at least 0.5ft to <2ft from the surface or the bottom of the outlet.	points = 3	
	The wetland is a "headwater" wetland.	points = 3	
	The wetland is flat but has small depressions on the surface that trap water.	points = 1	
	Marks of ponding are less than 0.5ft (6in).	points = 0	Score: 3

<b>D 4.3</b> What is the contribution of t	the wetland to storage in the watershed?			
The area of the basin is less than 1	10 times the area of the unit	points = 5		
The area of the basin is 10 to 100	times the area of the unit	points = 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	Score:	
		Total for D 4:	10	
Rating of Site Potential	[] 12-16 = H [X] 6-11 = M [] 0-5 = L	Record the rating on t	the first p	0(
D 5.0 Does the landscape have t	he potential to support hydrologic functions of t	he site?		
<b>D 5.1</b> Does the wetland unit receive	ve stormwater discharges?			
Yes		points = 1		
No		points = 0	Score:	
<b>D 5.2</b> Is > 10% of the area within 1	50 ft of the wetland in land uses that generate exce	ss runoff?		
Yes		points = 1		
No		points = 0	Score:	
<b>D 5.3</b> Is more than 25% of the cor	ntributing basin of the wetland covered with intension	/e human land uses?		
Yes		points = 1		
No		points = 0	Score:	
		Total for D 5:	1	
Rating of Landscape Potential	[] 3 = H [X] 1-2 = M [] 0 = L	Record the rating on t	the first <sub>I</sub>	ט
D 6.0 Are the hydrologic functio	ns provided by the site valuable to society?			_
<b>D 6.1</b> Is the wetland in a landscape	e that has flooding problems?			
Flooding occurs in a sub-basin tha	at is immediately down-gradient of the wetland.	points = 2		
Surface flooding problems are in a	a sub-basin farther down-gradient.	points = 1		
Flooding from groundwater is an i	issue in the basin.	points = 1		
The existing or potential outflow f	rom the wetland is so constrained that water	points = 0		
cannot reach areas that flood.		·		
There are no problems with floodi	ng downstream of the wetland.	points = 0	Score:	
D 6.2 Has the site been identified	as important for flood storage or flood conveyance	_	ol plan?	
U.2 mas the site been identified				
Yes		points = 2		
		points = 2 points = 0	Score:	_

**Rating of Value** 

[] **2-4** = **H**[] **1** = **M**[X] **0** = **L** 

Record the rating on the first page

# **HABITAT FUNCTIONS**

**These questions apply to wetlands of all HGM classes** - Indicators that the site functions to provide important habitat

## H 1.0 Does the wetland have the potential to provide habitat for many species?

H 1.1 What is the structure of the plant community?			
✓ Aquatic Bed			
▼ Emergent			
▼ Scrub-shrub			
Forested			
Multiple strata within the Forested class (canopy, sub-canopy, shrubs, herbaceous,			
moss/ground cover)			
4 structures or more	points = 4		
3 structures	points = 2		
2 structures	points = 1		
1 structure	points = 0		
No structures present	points = 0	Score:	2
H 1.2 What are the hydroperiods that meet the size thresholds in the wetland?			
✓ Permanently flooded or inundated			
✓ Seasonally flooded or inundated			
Occasionally flooded or inundated			
✓ Saturated only			
Permanently flowing stream or river in, or adjacent to, the wetland			
Seasonally flowing stream in, or adjacent to, the wetland			
Lake Fringe wetland			
Freshwater Tidal wetland			
4 or more types present	points = 3		
3 types present or Lake Fringe / Freshwater Tidal Fringe	points = 2		
2 types present	points = 1		
1 type present	points = 0		
None present	points = 0	Score:	2
H 1.3 What is the richness of the plant species in the wetland?			
>19 species	points = 2		
5-19 species	points = 1		
<5 species	points = 0	Score:	1

H 1.4 What is the interspersion of habitats?		
High	points = 3	
Moderate	points = 2	
Low	points = 1	
None	points = 0	Score: 3
H 1.5 What are the special habitat features in the wetland?		
Large, downed, woody debris within the wetland (>4in diameter and 6ft long).		
Standing snags (dbh >4in) within the wetland		
Undercut banks are present for at least 6.6ft (2m) and/or overhanging plants		
extend at least 3.3ft (1m) over open water or a stream (or ditch) in, or contiguous with		
the wetland, for at least 33ft (10m)		
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 (cut shrubs		
or trees that have not yet weathered where wood is exposed)		
At least 0.25ac of thin-stemmed persistent plants or woody branches are present		
in areas that are permanently or seasonally inundated (structures for egg-laying by		
amphibians)		
Invasive plants cover less than 25% of the wetland area in every stratum of plants		
(see H 1.1 for list of strata)		
6 habitats selected	points = 6	
5 habitats selected	points = 5	
4 habitats selected	points = 4	
3 habitats selected	points = 3	
2 habitats selected	points = 2	
1 habitat selected	points = 1	
No habitats selected	points = 0	Score: 4
	Total for H 1:	12

**Rating of Site Potential** 

[ ] 15-18 = H [X] 7-14 = M [ ] 0-6 = L

Record the rating on the first page

# H 2.0 Does the landscape have the potential to support habitat functions of the site?

H 2.1 What is the percentage of accessible habitat within 1km of the wetland?		
>33% of 1km Polygon	points = 3	
20-33% of 1km Polygon	points = 2	
10-19% of 1km Polygon	points = 1	
<10% of 1km Polygon	points = 0	Score: 1
H 2.2 What is the percentage of total habitat in a 1km polygon around the wetland?		
Total habitat is >50% of the Polygon	points = 3	
Total habitat is 10-50% of the Polygon and in 1-3 patches	points = 2	
Total habitat is 10-50% of the Polygon and in >3 patches	points = 1	
Total habitat is <10% of the Polygon	points = 0	Score: 3

Wetland	name	ori	num	hor.	Δ

Total for H 2:	4	
<50% of the Polygon is high intensity land use points = 0	Score:	0
50% of the Polygon is high intensity land use points = -2		
H 2.3 What is the land use intensity in the 1km polygon?		

**Rating of Landscape Potential** 

[X] **4-6** = **H** [ ] **1-3** = **M** [ ] **0** = **L** 

Record the rating on the first page

# H 3.0 Is the habitat provided by the site valuable to society?

		Total for H 3	2	
The site	does not meet any of the criteria for societal value	points = 0	Score:	2
The site	nas 1 or 2 WDFW priority habitats within 100m	points = 1		
for socie	tal value	ροπια – Δ		
The wetl	and has 3 or more WDFW priority habitats within 100m, or meets the criteria	points = 2		
The v	vetland has been categorized as an important habitat site in a local plan			
	vetland is a Wetland of High Conservation Value			
	vetland is mapped as a location for an individual WDFW priority species			
	vetland provides habitat for Threatened or Endangered species			
	wing criteria automatically score 2 points:			
Talus				
	s and Logs			
Cliffs				
Caves				
	shore (Coastal, Open Coast, Puget Sound)			
<b>✓</b> Instre				
	Deepwater			
	side Prarie			
<b>✓</b> Ripar				
	on White Oak			
Old-g	rowth/Mature Forests			
Herba	aceous Balds			
<b>✓</b> Biodi	versity Areas and Corridors			
Aspe	n Stands			
H 3.1 Do	es the site provide habitat for species valued in laws, regulations, or policies?			

**Rating of Value** 

[X] **2** = **H** [] **1** = **M** [] **0** = **L** 

Record the rating on the first page

# **CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS**

## **SC 1.0 Estuarine Wetlands**

SC 1.1 Does the wetland meet all of the following criteria for Estuarine wetlands?  The dominant water regime is tidal  The wetland is vegetated  The water salinity is greater than 0.5 ppt	
Yes - Go to SC 1.2	
No - Not an Estuarine Wetland	Result: Not an Estuarine Wetland
SC 1.2 <u>Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, National Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-1513</u>	
Yes - Category I Estuarine Wetland No - Go to SC 1.3	Result:
SC 1.3 Is the wetland unit at least 1ac in size and meets at least two of the following three condition.  The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 10% cover of non-native plant species.  At least 75% of the landward edge of the wetland has a 100ft buffer of shrub, forest, or ungrazed or un-mowed grassland  The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.	ons?
Yes - Category I Estuarine Wetland No - Category II Estuarine Wetland	Result:
SC 2.0 Wetlands of High Conservation Value	
SC 2.1 Does the wetland overlap with any known or historical rare plant or rare & high-quality eco WNHP Data Explorer?	osystem polygons on the
Yes - Category I Wetland of High Conservation Value No - Go to SC 2.2	Result: Go to SC 2.2
SC 2.2 Does the wetland have a rare plant species, rare plant community, or high-quality common may qualify the site as a WHCV?	plant community that
Yes - Category I Wetland of High Conservation Value	
No - Not a Wetland of High Conservation Value	Result: Not a Wetland of High Conservation Value

SC 3.0 Bogs	
SC 3.1 Does an area within the wetland unit have organic soil horizons, either peats or muck	s, that compose 16in or more
of the first 32in of the soil profile?	
Yes - Go to SC 3.3	
No - Go to SC 3.2	Result: Go to SC 3.2
SC 3.2 Does an area within the wetland unit have organic soils, either peats or mucks, that are	re 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?
Yes - Go to SC 3.3	
No - Not a Bog Wetland	Result: Not a Bog
Not a bog Welland	Wetland
SC 3.3 Does an area with peats or mucks have more than 70% cover of mosses at ground lev	vel, AND at least 30% cover of
plant species listed in the table provided in the instructions?	
Yes - Category I Bog Wetland	
No - Go to SC 3.4	Result:
SC 3.4 <u>Is an area with peats or mucks forested (&gt;30% cover) with Sitka spruce, subalpine fir,</u>	western red cedar, western
hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any	
combinations of species) listed in the table found in the instructions provide more than 30%	of the cover under the
<u>canopy?</u>	
Yes - Category I Bog Wetland	n ti
No - Not a Bog Wetland	Result:
SC 4.0 Forested Wetlands	
SC 4.1 Does the wetland have at least 1 contiguous acre of forest that meets one of the follo	owing criteria?
Old-growth forests	
Mature forests	
Yes - Category I Forested Wetland	

**Result: Not a Forested** 

Wetland

Wetland name or number: 4

No - Not a Forested Wetland

## **SC 5.0 Wetlands in Coastal Lagoons**

-	
SC 5.1 Coastal Lagoons: Does the wetland meet all of the following criteria of a wetland in a coast 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 rocks  The depression 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 open water area (measured near the bottom)	
Yes - Go to SC 5.2	
No - Not a Coastal Lagoon Wetland	Result: Not a Coastal Lagoon Wetland
SC E 2 Door the wetland most all of the following three conditions?	
SC 5.2 Does the wetland meet all of the following three conditions?  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).	
At least 75% of the landward edge of the wetland has a 100ft buffer of shrub, forest, or ungrazed or un-mowed grassland.	
the wetland is larger than 0.10ac (4350 sqft)	
Yes - Category I Coastal Lagoon	Result:
No - Category II Coastal Lagoon	Result:
SC 6.0 Interdunal Wetlands	
SC 6.1 Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownershi	<u>p WBUO)?</u>
Yes - Go to SC 6.2	
No - Not an Interdunal Wetland	Result: Not an Interdunal Wetland
SC 6.2 Is the wetland 1ac or larger in size, or a mosaic that is 1ac or larger in size?	
Wetland is larger than 1ac in size - Go to SC 6.3	
Wetland is a mosaic larger than 1ac is size - Category II Interdunal Wetland	
No - Go to SC 6.4	Result:
SC 6.3 Does the wetland score 8 or 9 points for the habitat functions?	
Yes - Category I Interdunal Wetland	
No - Category II Interdunal Wetland	Result:
SC 6.4 Is the wetland unit between 0.1ac and 1ac, or in a mosaic of wetlands that is between 0.1ac	and 1ac in size?
Yes - Category III Interdunal Wetland	
No - Category IV Interdunal Wetland	Result:

# **Category of wetland based on Special Characteristics**

If you answered No for all types, enter "Not Applicable" on Summary Form

Final Category: Not Applicable

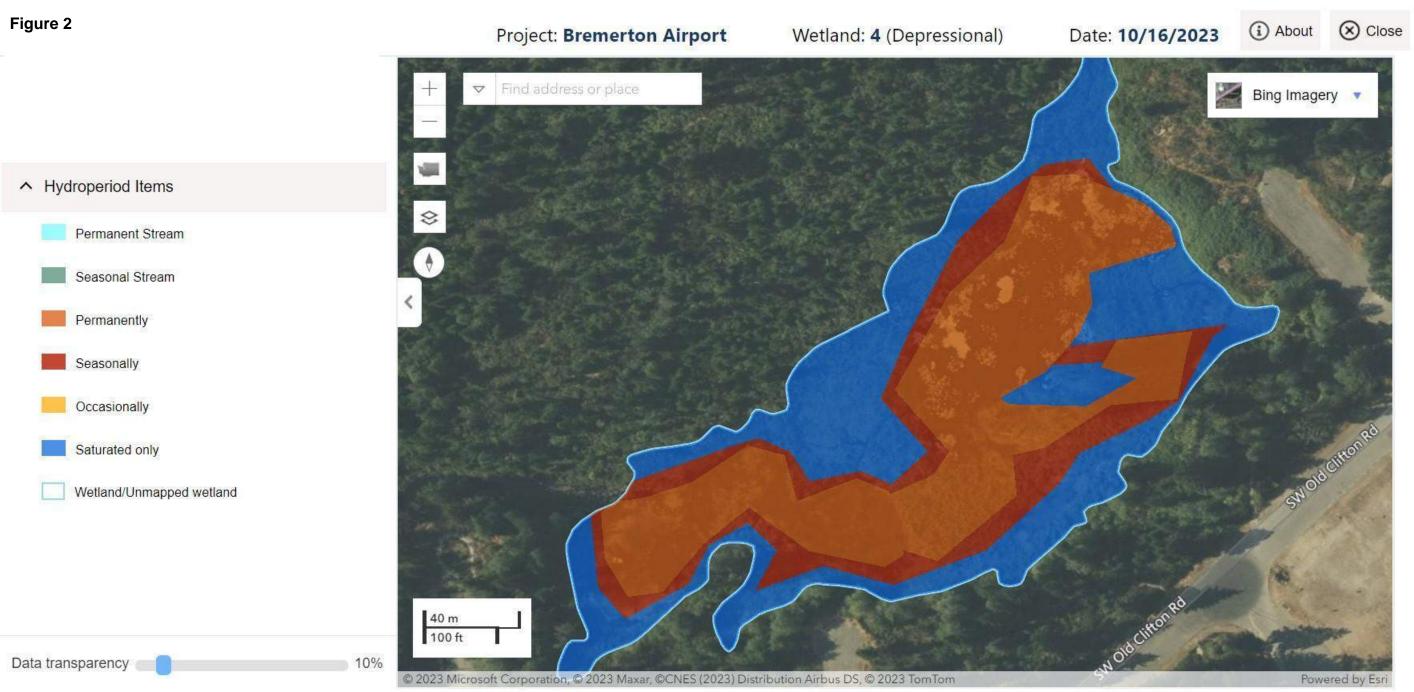
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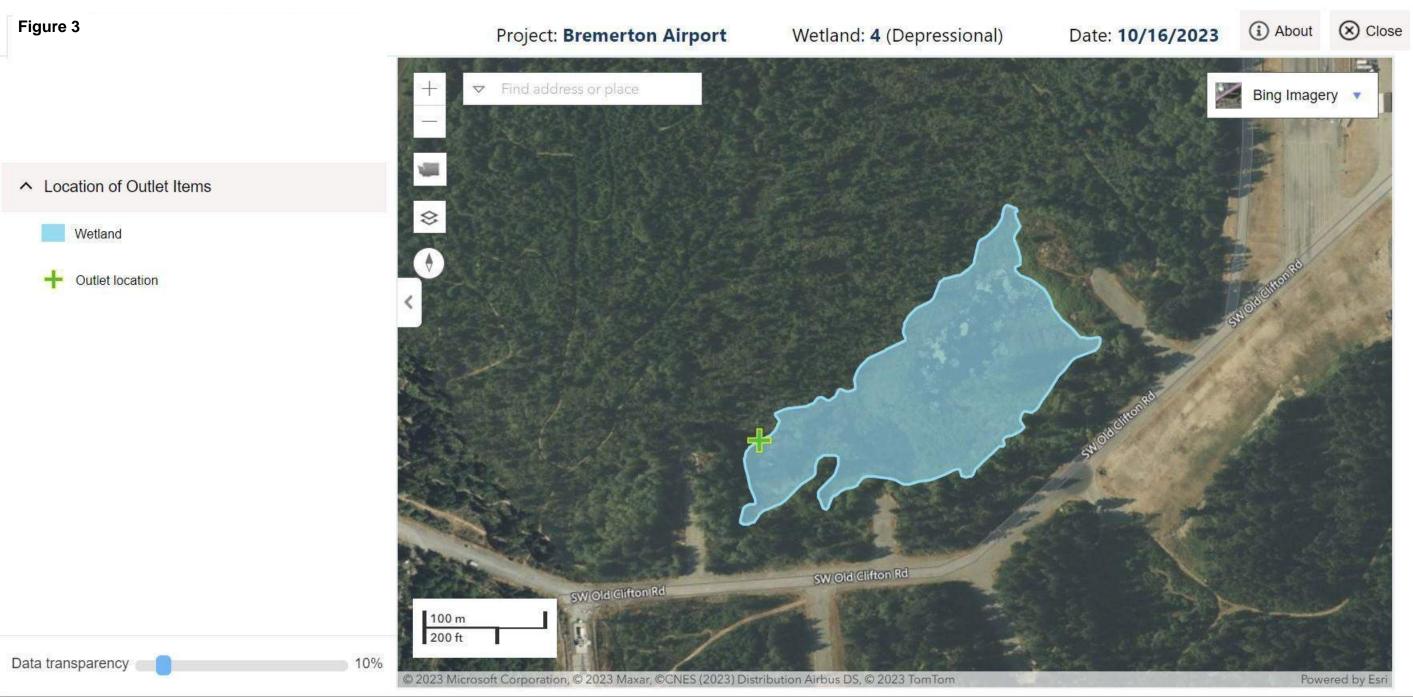
⊗ Close

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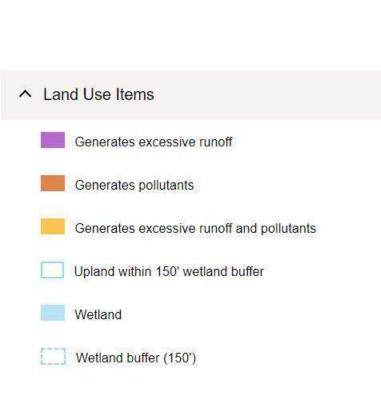
(i) About

Bing Imagery v

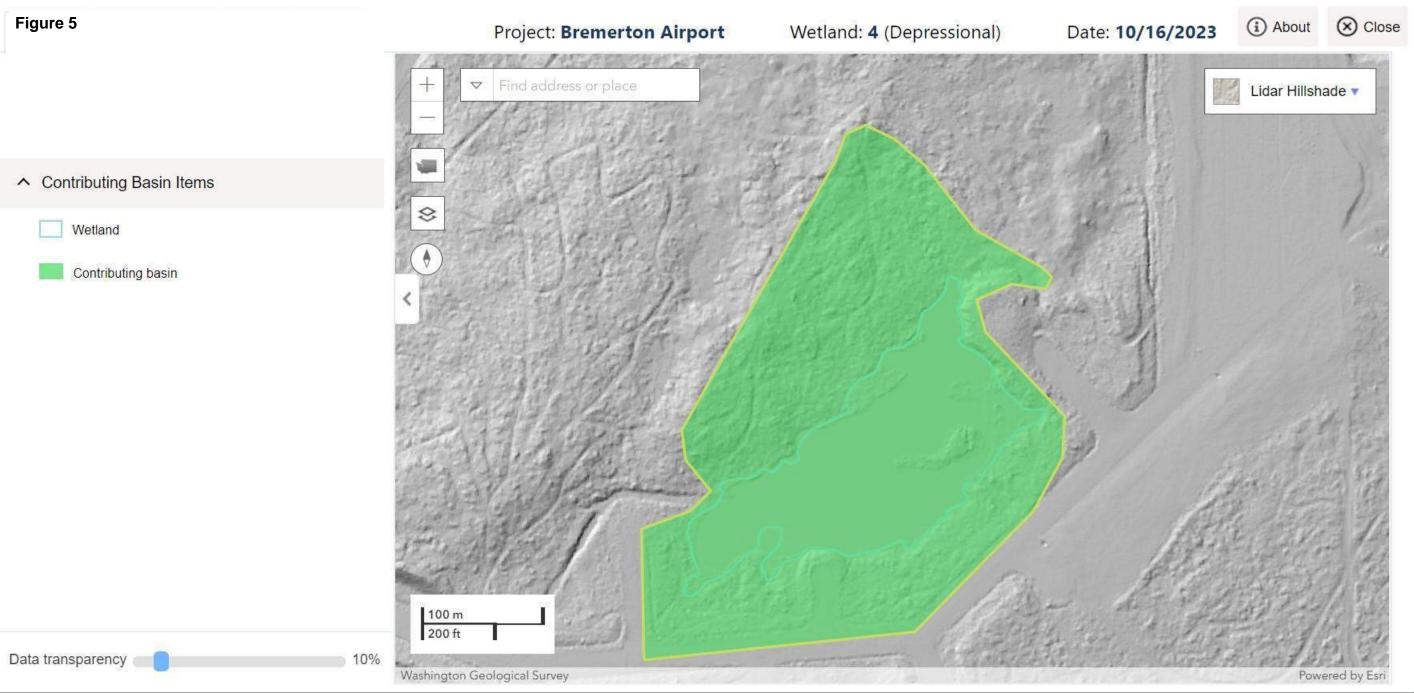














- ↑ Habitat Items
  - Relatively undisturbed accessible
  - Low/Moderate intensity accessible
  - Relatively undisturbed not accessible
  - Low/Moderate intensity not accessible
  - High Intensity
  - Wetland
  - Unmapped wetland buffer (1 km)

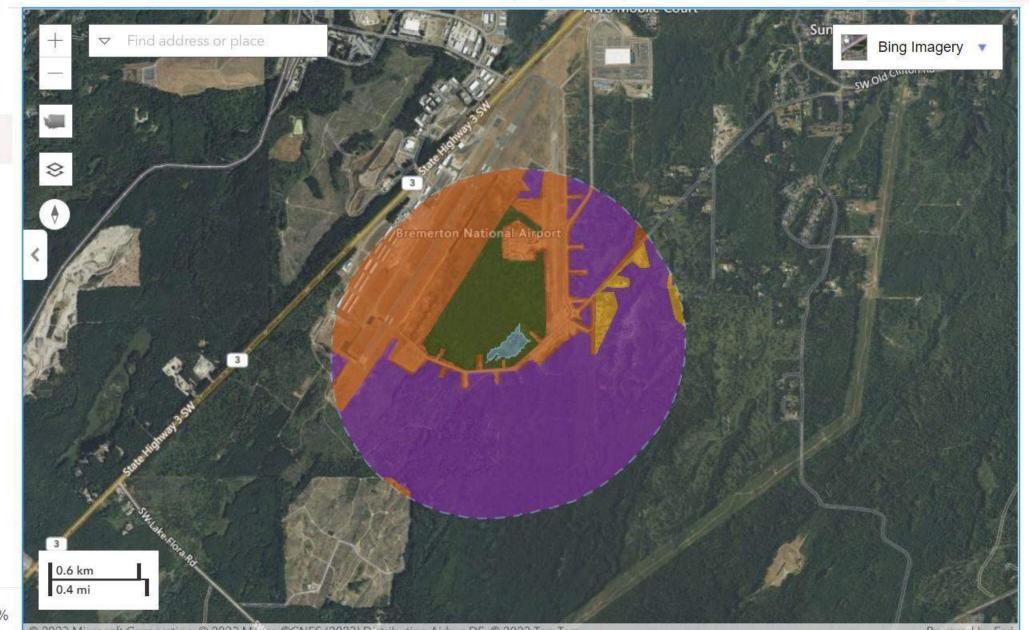
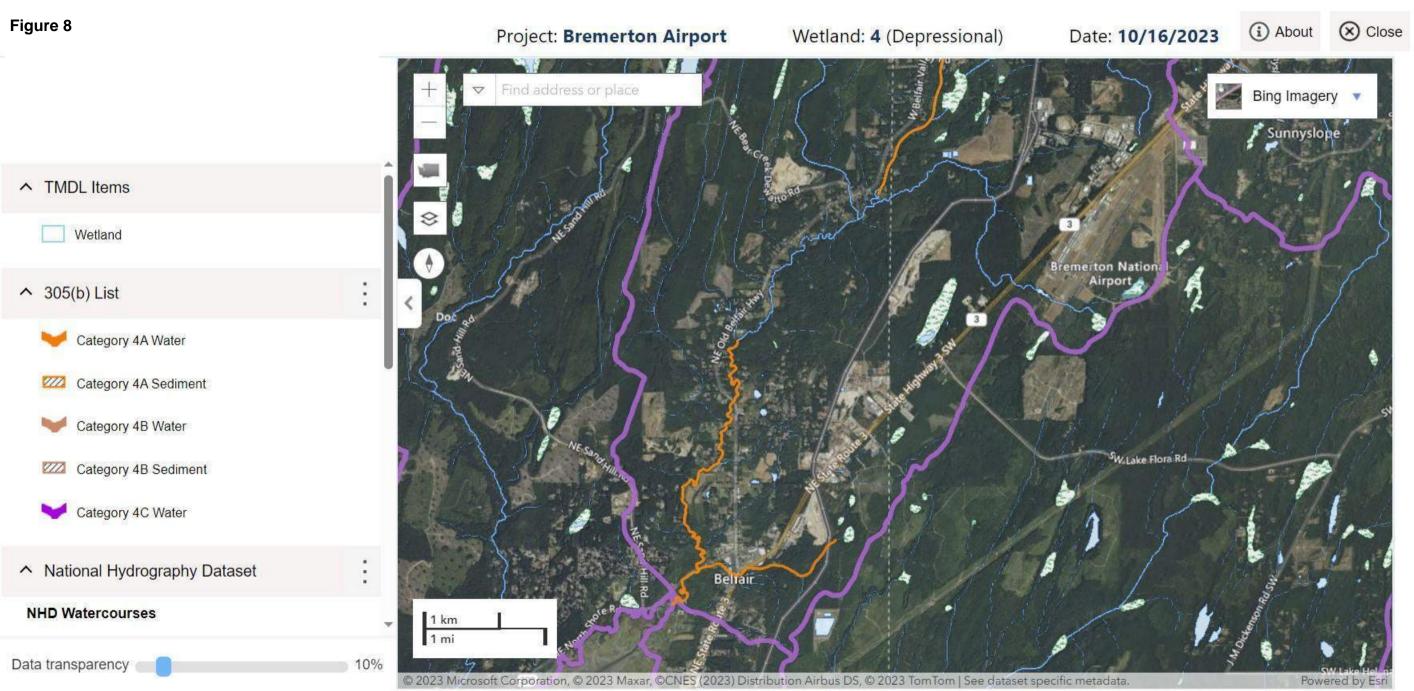


Figure 7 (i) About **Project: Bremerton Airport** Wetland: 4 (Depressional) Date: 11/20/2023 Find address or place Bing Imagery 🔻 Aero Mobile Court Wetland Distance: wetland to nearest 303(d) listing ^ 303(d) List //Bremerton National Airport Category 5 Water ZZZZ Category 5 Sediment Subbasins (12 digit HUCs) HUC boundary 0.6 km 0.4 mi Data transparency © 2023 Microsoft Corporation, © 2023 Mayar @CNES (2023) Distribution Airbus DS, © 2023 TomTom Powered by Esri



# **RATING SUMMARY - Western Washington**

Name of wetland (or ID#): 5 Date of site visit: 10/23/2023

Rated By: Matthew Evinger Trained by Ecology? Yes [X] No [] Date of Training:

06/09/2022

**HGM Class used for rating:** Depressional **Wetland has multiple HGM classes? Yes** [] **No** [X]

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

Source of base aerial photo/map:

**OVERALL WETLAND CATEGORY:** [Category II] (based on functions [X] 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	
Site Potential	Н	Н	М	
Landscape Potential	M	M	Н	
Value	Н	L	М	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	
Wetland of High Conservation Value	
Bog	
Forested	
Coastal Lagoon	
Interdunal	
None of the above	Not Applicable

# Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

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 (can be added to map of hydroperiods)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	D 2.2, D 5.2	
Map of the contributing basin	D 4.3, D 5.3	
1km Polygon: Area that extends 1km 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	

# **DEPRESSIONAL AND FLATS WETLANDS**

Water Quality Functions - Indicators that the site functions to improve water quality

D 1.0 Does the site have the pot	ential to improve water quality?			
<b>D 1.1</b> What are the characteristics	of surface water outflows from the wetland?			
Wetland has no surface water outl	et.	points = 3		
Wetland has an intermittently flow	ving, or highly constricted, outlet.	points = 2		
Wetland has an unconstricted, or spermanently flowing	slightly constricted, surface outlet that is	points = 1		
Wetland is a flat depression whose	e outlet is a permanently flowing ditch.	points = 1	Score:	3
<b>D 1.2</b> Can the soil 2in below the so	urface be identified as true clay or organic soil?			
Mapped as true clay or organic (m	nuck or peat)	points = 4		
Soil texture identified as clay or or	ganic in field	points = 4		
Soil texture identified as clay or or	ganic by laboratory test	points = 4		
None of the above		points = 0	Score:	0
<b>D 1.3</b> What are the characteristics	and distribution of persistent plants?			
Wetland has persistent, ungrazed,	plants > 95% of area	points = 5		
Wetland has persistent, ungrazed,	plants > 50% of area	points = 3		
Wetland has persistent, ungrazed	plants > 10% of area	points = 1		
Wetland has persistent, ungrazed	plants < 10% of area	points = 0	Score:	5
<b>D 1.4</b> What are the characteristics	of seasonal ponding or inundation in the wetland	area?		
Area seasonally ponded is > 50%	total area of wetland	points = 4		
Area seasonally ponded is > 25%	total area of wetland	points = 2		
Area seasonally ponded is < 25%	total area of wetland	points = 0	Score:	4
		Total for D 1:	12	
Rating of Site Potential	[X] 12-16 = H [ ] 6-11 = M [ ] 0-5 = L	Record the rating on t	he first p	pag

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	points = 1		
No	points = 0 Sc	core:	1
D 2.2 Is > 10% of the area within 150ft of the wetland in land u	ses that generate pollutants in surface runoff?		
Yes	points = 1		
No	points = 0	core:	0
D 2.3 Are there septic systems within 250ft of the wetland?			
Yes	points = 1		
No	points = 0	ore:	0
D 2.4 Are there other sources of pollutants coming into the we	etland that are not listed in questions D 2.1-D 2.3?		
Yes	points = 1		
No	points = 0 Sc	core:	0

D 2.5 What are the other sources of pollutants coming into the wetland?	
Total for D 2:	1

Rating of Landscape Potential	[] <b>3-4</b> = <b>H</b> [X] <b>1-2</b> = <b>M</b> [] <b>0</b> = <b>L</b>	Record the rating on the first page

Rating of Landscape Fotential		Record the rating on t	ne just p	uge
D 3.0 Is the water quality improvement	provided by the site valuable to society?			
D 3.1 Does the wetland discharge directly	<u>(i.e., within 1 mi) to a stream, river, lake, or ma</u>	arine water that is on th	e 303(d)	
list?				
Yes		points = 1		
No		points = 0	Score:	0
D 3.2 Is the wetland in a basin or sub-basin	in where an aquatic resource is on the 303(d) I	ist?		
Yes		points = 1		
No		points = 0	Score:	1
D 3.3 Has the site been identified in a wat	tershed or local plan as important for maintain	ing water quality?		
Yes		points = 2		
No		points = 0	Score:	2
		Total for D 3:	3	

**Rating of Value** 

[X] 2-4 = H[] 1 = M[] 0 = L

Record the rating on the first page

# **DEPRESSIONAL AND FLATS WETLANDS**

**Hydrologic Functions** - Indicators that the site functions to reduce flooding and stream degradtion

## D 4.0 Does the site have the potential to reduce flooding and erosion?

<b>D 4.1</b> What are the characteristics of surface water outflows from the wetland?		
Wetland has no surface water outlet.	points = 4	
Wetland has an intermittently flowing, or highly constricted, outlet.	points = 2	
Wetland is a flat depression whose outlet is a permanently flowing ditch.	points = 1	
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	Score: 4
D 4.2 What is the depth of storage during the wet periods?		
Marks of ponding are 3ft or more above the surface or bottom of the outlet.	points = 7	
Marks of ponding are between 2ft to <3ft from the surface or bottom of the outlet.	points = 5	
Marks of ponding are at least 0.5ft to <2ft from the surface or the bottom of the outlet.	points = 3	
The wetland is a "headwater" wetland.	points = 3	
The wetland is flat but has small depressions on the surface that trap water.	points = 1	
Marks of ponding are less than 0.5ft (6in).	points = 0	Score: 3

D 4.3 What is the contribution of the	e wetland to storage in the watershed?			
The area of the basin is less than 10	9	points = 5		
The area of the basin is 10 to 100 tin	nes the area of the unit	points = 3		
The area of the basin is more than 10	00 times the area of the unit	points = 0		
Entire wetland is in the Flats class		points = 5	Score:	
		Total for D 4:	12	_
Rating of Site Potential	[X] <b>12-16</b> = <b>H</b> [ ] <b>6-11</b> = <b>M</b> [ ] <b>0-5</b> = <b>L</b>	Record the rating on	the first p	20
5.0 Does the landscape have the	potential to support hydrologic functions of t	he site?		
D 5.1 Does the wetland unit receive	stormwater discharges?			
Yes		points = 1		
No		points = 0	Score:	
<b>D 5.2</b> <u>Is &gt;10% of the area within 150</u>	) ft of the wetland in land uses that generate exce	ss runoff?		
Yes		points = 1		
No		points = 0	Score:	
<b>D 5.3</b> Is more than 25% of the contri	ibuting basin of the wetland covered with intensiv	<u>re human land uses?</u>		
Yes		points = 1		
No		points = 0	Score:	
		Total for D 5:	1	
Rating of Landscape Potential	[] 3 = H [X] 1-2 = M [] 0 = L	Record the rating on	the first $\mu$	20
O 6.0 Are the hydrologic functions	provided by the site valuable to society?			_
<b>D 6.1</b> Is the wetland in a landscape t	hat has flooding problems?			
Flooding occurs in a sub-basin that i	s immediately down-gradient of the wetland.	points = 2		
Surface flooding problems are in a s	ub-basin farther down-gradient.	points = 1		
Flooding from groundwater is an iss	ue in the basin.	points = 1		
• .	m the wetland is so constrained that water	points = 0		
cannot reach areas that flood.		·		
There are no problems with flooding	g downstream of the wetland.	points = 0	Score:	
<b>D 6.2</b> Has the site been identified as	important for flood storage or flood conveyance	-	ol plan?	
/		points = 2		
Yes		points = 0	Score:	

**Rating of Value** 

[] **2-4** = **H**[] **1** = **M**[X] **0** = **L** 

Record the rating on the first page

# **HABITAT FUNCTIONS**

**These questions apply to wetlands of all HGM classes** - Indicators that the site functions to provide important habitat

# H 1.0 Does the wetland have the potential to provide habitat for many species?

H 1.1 What is the structure of the plant community?			
Aquatic Bed			
▼ Emergent			
✓ Scrub-shrub			
▼ Forested			
Multiple strata within the Forested class (canopy, sub-canopy, shrubs, herbaceous,			
moss/ground cover)			
4 structures or more	points = 4		
3 structures	points = 2		
2 structures	points = 1		
1 structure	points = 0		
No structures present	points = 0	Score:	2
H 1.2 What are the hydroperiods that meet the size thresholds in the wetland?			
✓ Permanently flooded or inundated			
✓ Seasonally flooded or inundated			
Occasionally flooded or inundated			
✓ Saturated only			
Permanently flowing stream or river in, or adjacent to, the wetland			
Seasonally flowing stream in, or adjacent to, the wetland			
Lake Fringe wetland			
Freshwater Tidal wetland			
4 or more types present	points = 3		
3 types present or Lake Fringe / Freshwater Tidal Fringe	points = 2		
2 types present	points = 1		
1 type present	points = 0		
None present	points = 0	Score:	2
H 1.3 What is the richness of the plant species in the wetland?			
>19 species	points = 2		
5-19 species	points = 1		
<5 species	points = 0	Score:	1

H 1.4 What is the interspersion of habitats?		
High	points = 3	
Moderate	points = 2	
Low	points = 1	
None	points = 0	Score: 3
H 1.5 What are the special habitat features in the wetland?		
Large, downed, woody debris within the wetland (>4in diameter and 6ft long).		
✓ Standing snags (dbh >4in) within the wetland		
Undercut banks are present for at least 6.6ft (2m) and/or overhanging plants		
extend at least 3.3ft (1m) over open water or a stream (or ditch) in, or contiguous with		
the wetland, for at least 33ft (10m)		
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 (cut shrubs		
or trees that have not yet weathered where wood is exposed)		
At least 0.25ac of thin-stemmed persistent plants or woody branches are present		
in areas that are permanently or seasonally inundated (structures for egg-laying by		
amphibians)		
Invasive plants cover less than 25% of the wetland area in every stratum of plants		
(see H 1.1 for list of strata)		
6 habitats selected	points = 6	
5 habitats selected	points = 5	
4 habitats selected	points = 4	
3 habitats selected	points = 3	
2 habitats selected	points = 2	
1 habitat selected	points = 1	
No habitats selected	points = 0	Score: 4
	Total for H 1:	12

**Rating of Site Potential** 

[] **15-18** = **H** [X] **7-14** = **M** [] **0-6** = **L** Record the rating on the first page

# H 2.0 Does the landscape have the potential to support habitat functions of the site?

H 2.1 What is the percentage of accessible habitat within 1km of the wetland?		
>33% of 1km Polygon	points = 3	
20-33% of 1km Polygon	points = 2	
10-19% of 1km Polygon	points = 1	
<10% of 1km Polygon	points = 0	Score: 3
H 2.2 What is the percentage of total habitat in a 1km polygon around the wetland?		
Total habitat is >50% of the Polygon	points = 3	
Total habitat is 10-50% of the Polygon and in 1-3 patches	points = 2	
Total habitat is 10-50% of the Polygon and in >3 patches	points = 1	
Total habitat is <10% of the Polygon	points = 0	Score: 3

							_
N۸	lat-	land	name	OF	num	hore	5

Total for H 2:	6	
<50% of the Polygon is high intensity land use points = 0	Score:	0
50% of the Polygon is high intensity land use points = -2		
H 2.3 What is the land use intensity in the 1km polygon?		

**Rating of Landscape Potential** 

[X] **4-6** = **H** [ ] **1-3** = **M** [ ] **0** = **L** 

Record the rating on the first page

# H 3.0 Is the habitat provided by the site valuable to society?

		Total for H 3:	1		
The site does not meet any of the criteria for societal value points = 0 Score: 1					
The site has 1 or 2 WDFW priority habitats within 100m points = 1					
for	for societal value				
Th	The wetland has 3 or more WDFW priority habitats within 100m, or meets the criteria points = 2				
	The wetland has been categorized as an important habitat site in a local plan				
	The wetland is a Wetland of High Conservation Value				
	The wetland is mapped as a location for an individual WDFW priority species				
	The wetland provides habitat for Threatened or Endangered species				
The	e following criteria automatically score 2 points:				
	Talus				
✓	Snags and Logs				
	Cliffs				
	Caves				
	Nearshore (Coastal, Open Coast, Puget Sound)				
	Instream				
	Fresh Deepwater				
	Westside Prarie				
	Riparian				
	Oregon White Oak				
	Old-growth/Mature Forests				
	Herbaceous Balds				
<b>√</b>	Biodiversity Areas and Corridors				
	Aspen Stands				
H 3.1 Does the site provide habitat for species valued in laws, regulations, or policies?					

**Rating of Value** 

[] 2 = H [X] 1 = M [] 0 = L

Record the rating on the first page

# **CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS**

## **SC 1.0 Estuarine Wetlands**

SC 1.1 Does the wetland meet all of the following criteria for Estuarine wetlands?  The dominant water regime is tidal  The wetland is vegetated  The water salinity is greater than 0.5 ppt	
Yes - Go to SC 1.2	
No - Not an Estuarine Wetland	Result: Not an Estuarine Wetland
SC 1.2 <u>Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, National Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-1513</u>	
Yes - Category I Estuarine Wetland No - Go to SC 1.3	Result:
SC 1.3 Is the wetland unit at least 1ac in size and meets at least two of the following three condition.  The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 10% cover of non-native plant species.  At least 75% of the landward edge of the wetland has a 100ft buffer of shrub, forest, or ungrazed or un-mowed grassland  The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.	ons?
Yes - Category I Estuarine Wetland No - Category II Estuarine Wetland	Result:
SC 2.0 Wetlands of High Conservation Value	
SC 2.1 Does the wetland overlap with any known or historical rare plant or rare & high-quality eco WNHP Data Explorer?	osystem polygons on the
Yes - Category I Wetland of High Conservation Value No - Go to SC 2.2	Result: Go to SC 2.2
SC 2.2 Does the wetland have a rare plant species, rare plant community, or high-quality common may qualify the site as a WHCV?	plant community that
Yes - Category I Wetland of High Conservation Value	
No - Not a Wetland of High Conservation Value	Result: Not a Wetland of High Conservation Value

SC 3.0 Bogs	
SC 3.1 Does an area within the wetland unit have organic soil horizons, either peats or mucks,	that compose 16in or more
of the first 32in of the soil profile?	
Yes - Go to SC 3.3	
No - Go to SC 3.2	Result: Go to SC 3.2
SC 3.2 Does an area within the wetland unit have organic soils, either peats or mucks, that are	·
bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top o	<u>f a lake or pond?</u>
Yes - Go to SC 3.3	
No - Not a Bog Wetland	Result: Not a Bog Wetland
SC 3.3 Does an area with peats or mucks have more than 70% cover of mosses at ground level	I, AND at least 30% cover of
plant species listed in the table provided in the instructions?	
Yes - Category I Bog Wetland	
No - Go to SC 3.4	Result:
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, we	
hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any o	
combinations of species) listed in the table found in the instructions provide more than 30% of	·
canopy?	
Yes - Category I Bog Wetland	
No - Not a Bog Wetland	Result:
SC 4.0 Forested Wetlands	
SC 4.1 Does the wetland have at least 1 contiguous acre of forest that meets one of the follow	ing criteria?
Old-growth forests	
Mature forests	
Yes - Category I Forested Wetland	

**Result: Not a Forested** 

Wetland

**Wetland name or number:** 5

No - Not a Forested Wetland

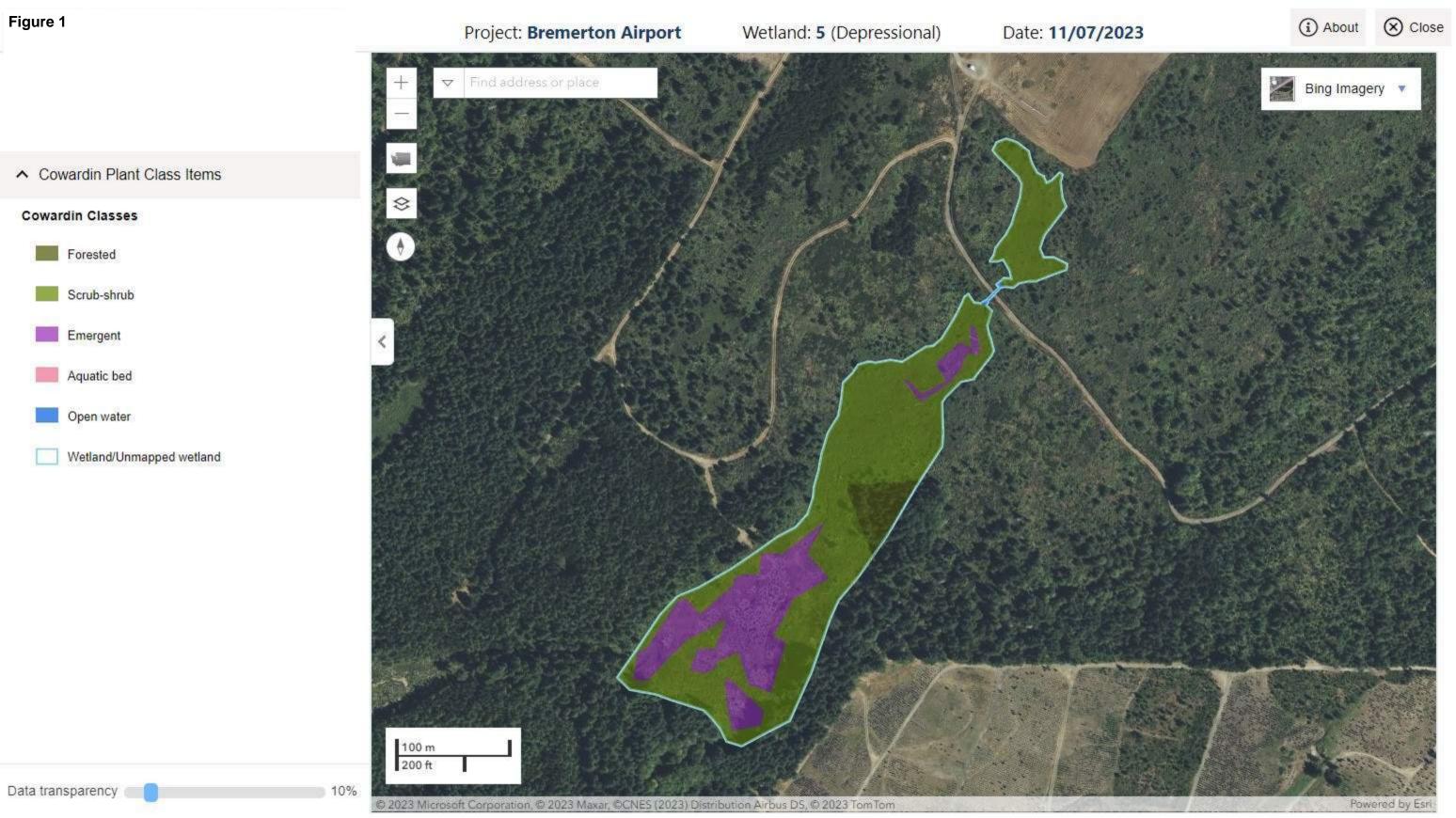
# **SC 5.0 Wetlands in Coastal Lagoons**

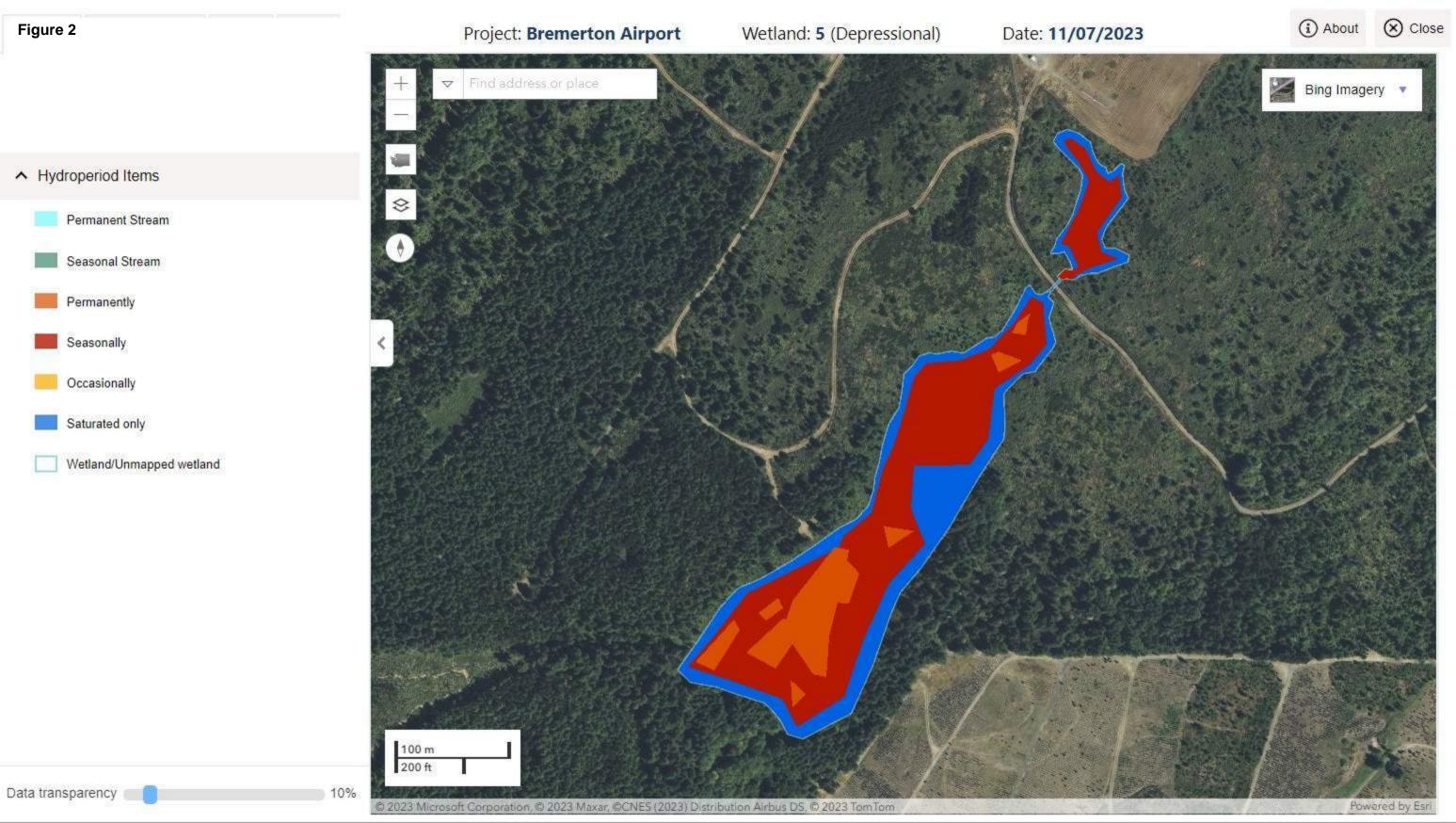
SC 5.1 Coastal Lagoons: Does the wetland meet all of the following criteria of a wetland in a coast The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or rocks	•
The depression in which the wetland is located contains ponded water that is saline or brackisl	h
(>0.5  ppt) during most of the year in at least a portion of the open water area (measured near the	
bottom)	
bottom)	
Vos. Co to SC F 2	
Yes - Go to SC 5.2	Descrite Net - Countel
No - Not a Coastal Lagoon Wetland	Result: Not a Coastal
	Lagoon Wetland
SC 5.2 Does the wetland meet all of the following three conditions?	
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).	
At least 75% of the landward edge of the wetland has a 100ft buffer of shrub, forest, or un-	
grazed or un-mowed grassland.	
the wetland is larger than 0.10ac (4350 sqft)	
Yes - Category I Coastal Lagoon	
No - Category I Coastal Lagoon	Result:
	Result.
SC 6.0 Interdunal Wetlands	
SC 6.1 Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownersh	ip WBUO)?
Yes - Go to SC 6.2	
	Result: Not an
No - Not an Interdunal Wetland	Interdunal Wetland
	THE CHANGE WELLING
SC 6.2 <u>Is the wetland 1ac or larger in size</u> , or a mosaic that is 1ac or larger in size?	
Wetland is larger than 1ac in size - Go to SC 6.3	
Wetland is a mosaic larger than 1ac is size - Category II Interdunal Wetland	
No - Go to SC 6.4	Result:
SC 6.3 Does the wetland score 8 or 9 points for the habitat functions?	
Yes - Category I Interdunal Wetland	
No - Category II Interdunal Wetland	Result:
SC 6.4 Is the wetland unit between 0.1ac and 1ac, or in a mosaic of wetlands that is between 0.1ac	c and fac in size?
15 the wettand unit between 0.1ac and 1ac, or in a mosaic of wettands that is between 0.1ac	c and tac in SIZE:
Vos. Catagony III Interdunal Wetland	
Yes - Category III Interdunal Wetland	- t
No - Category IV Interdunal Wetland	Result:

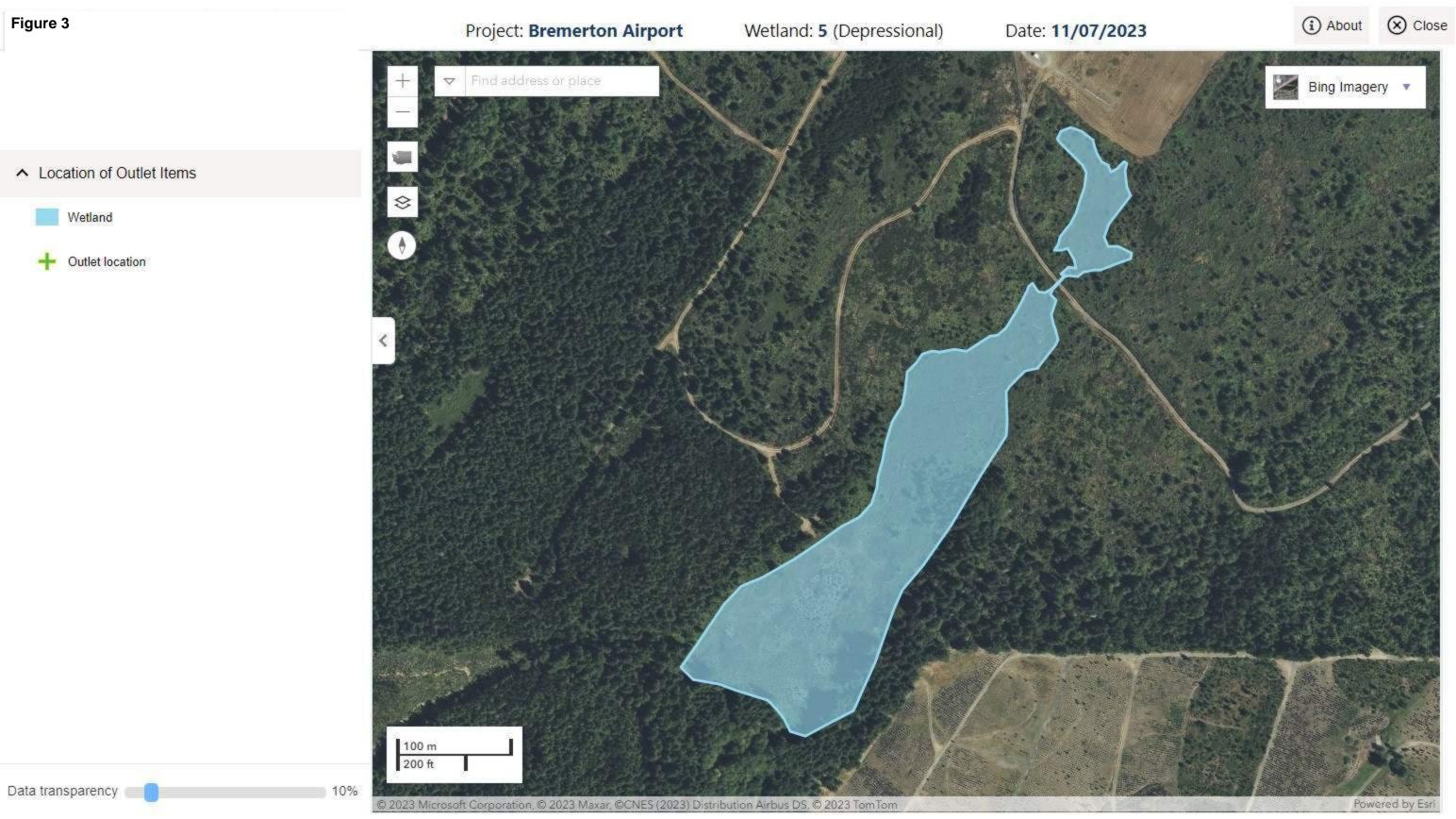
# **Category of wetland based on Special Characteristics**

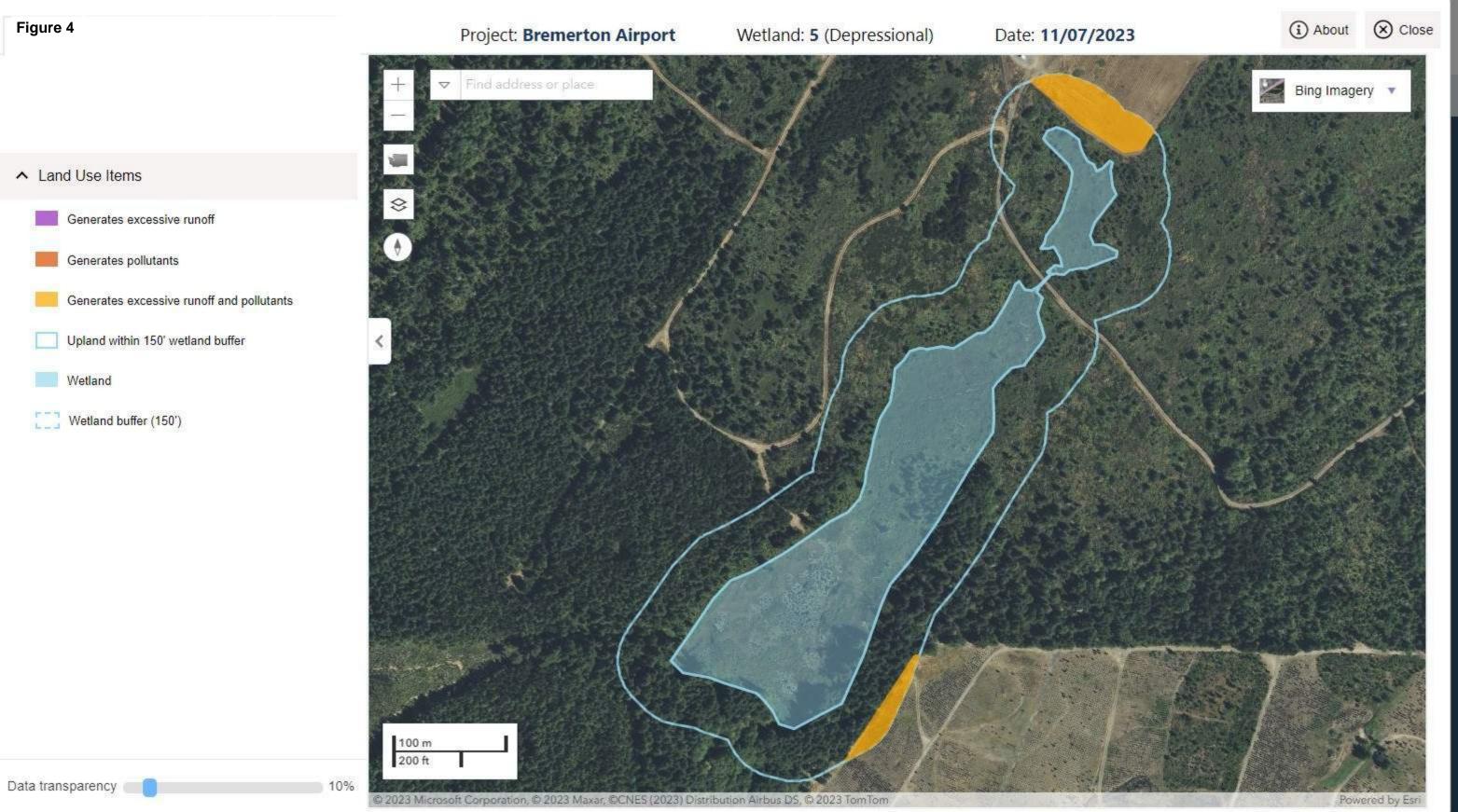
If you answered No for all types, enter "Not Applicable" on Summary Form

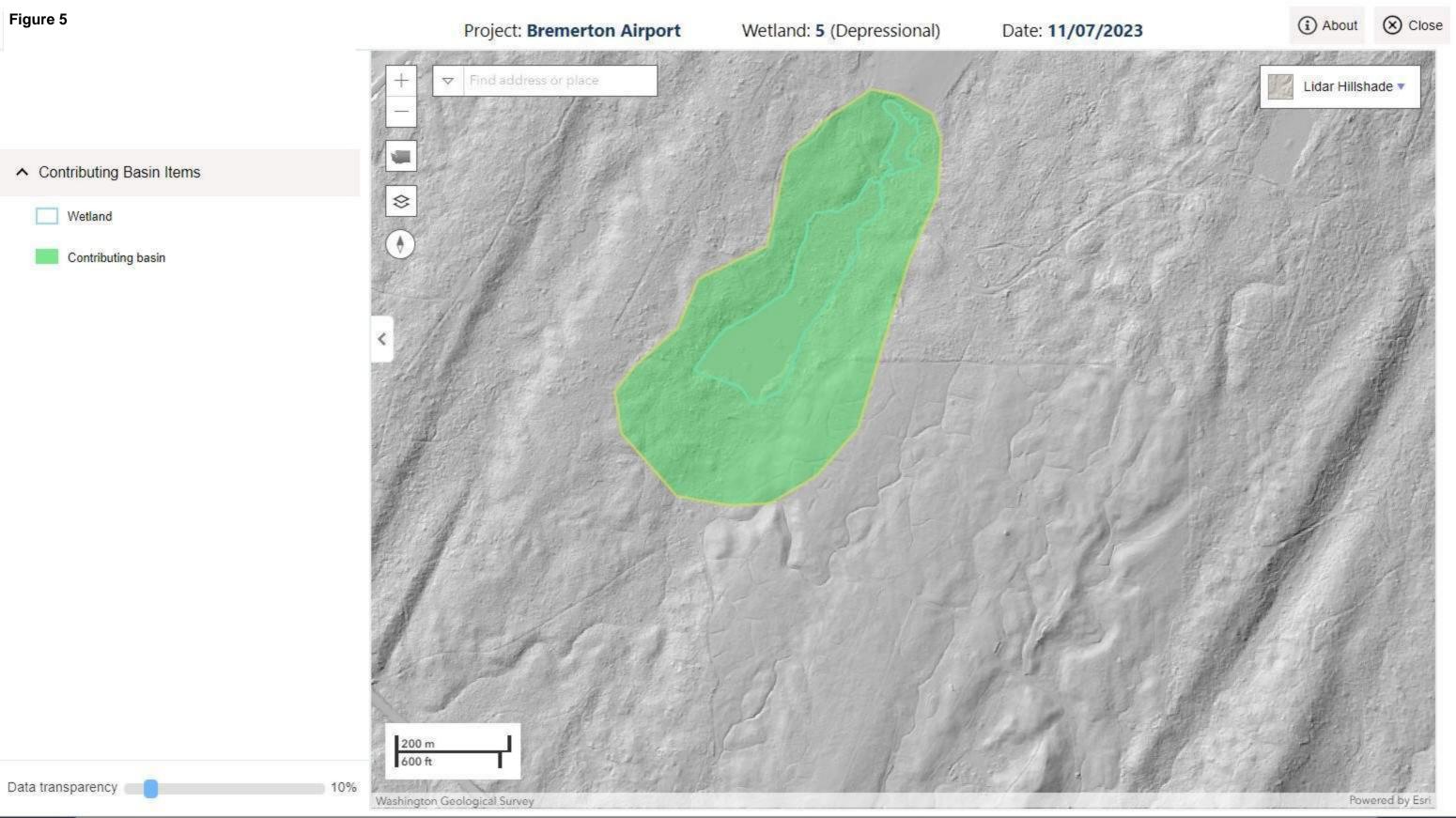
Final Category: Not Applicable





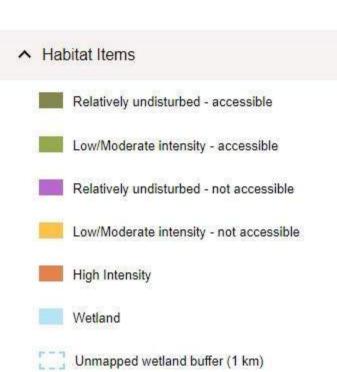


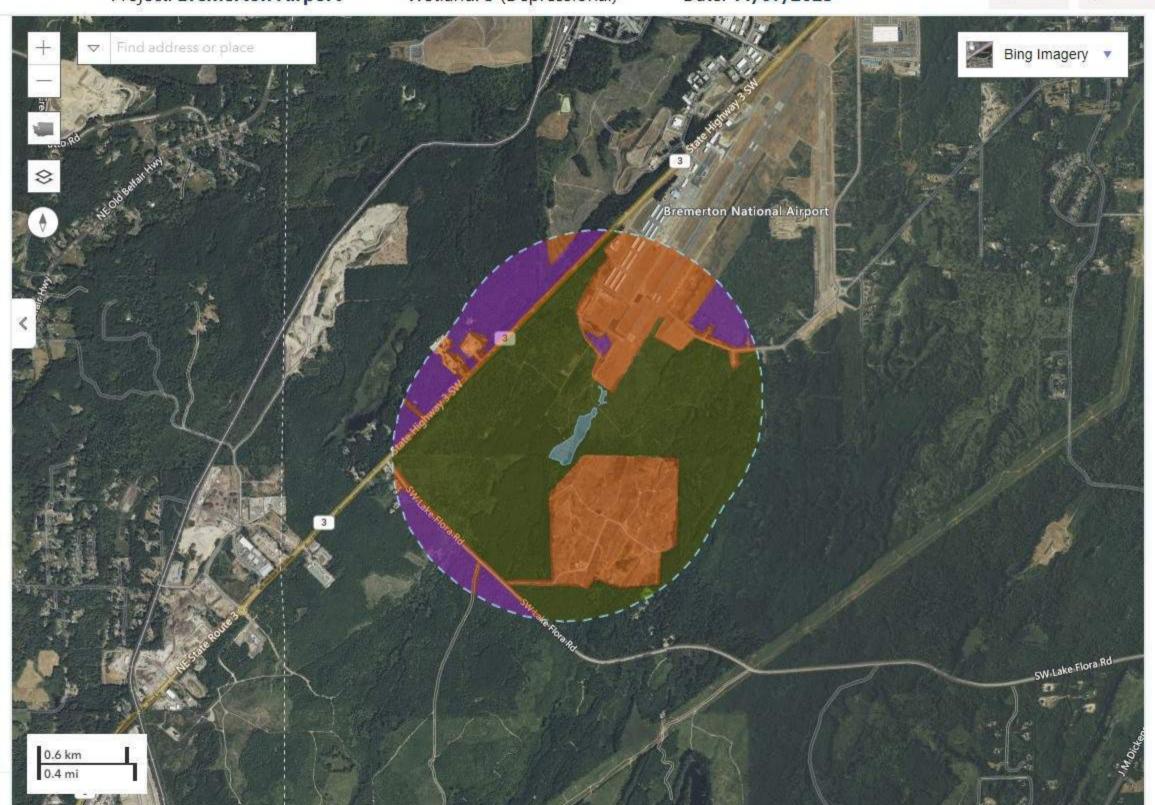


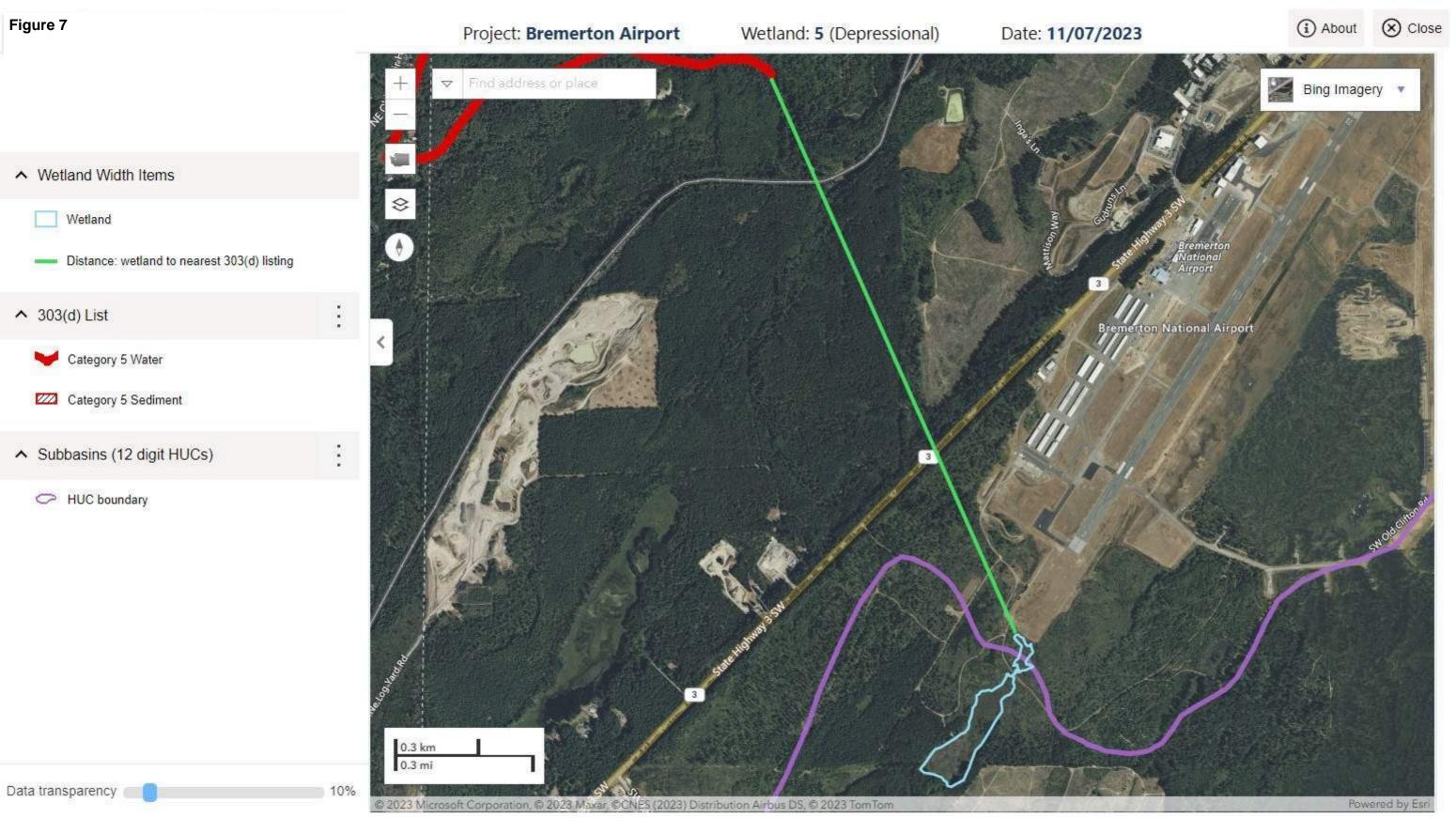


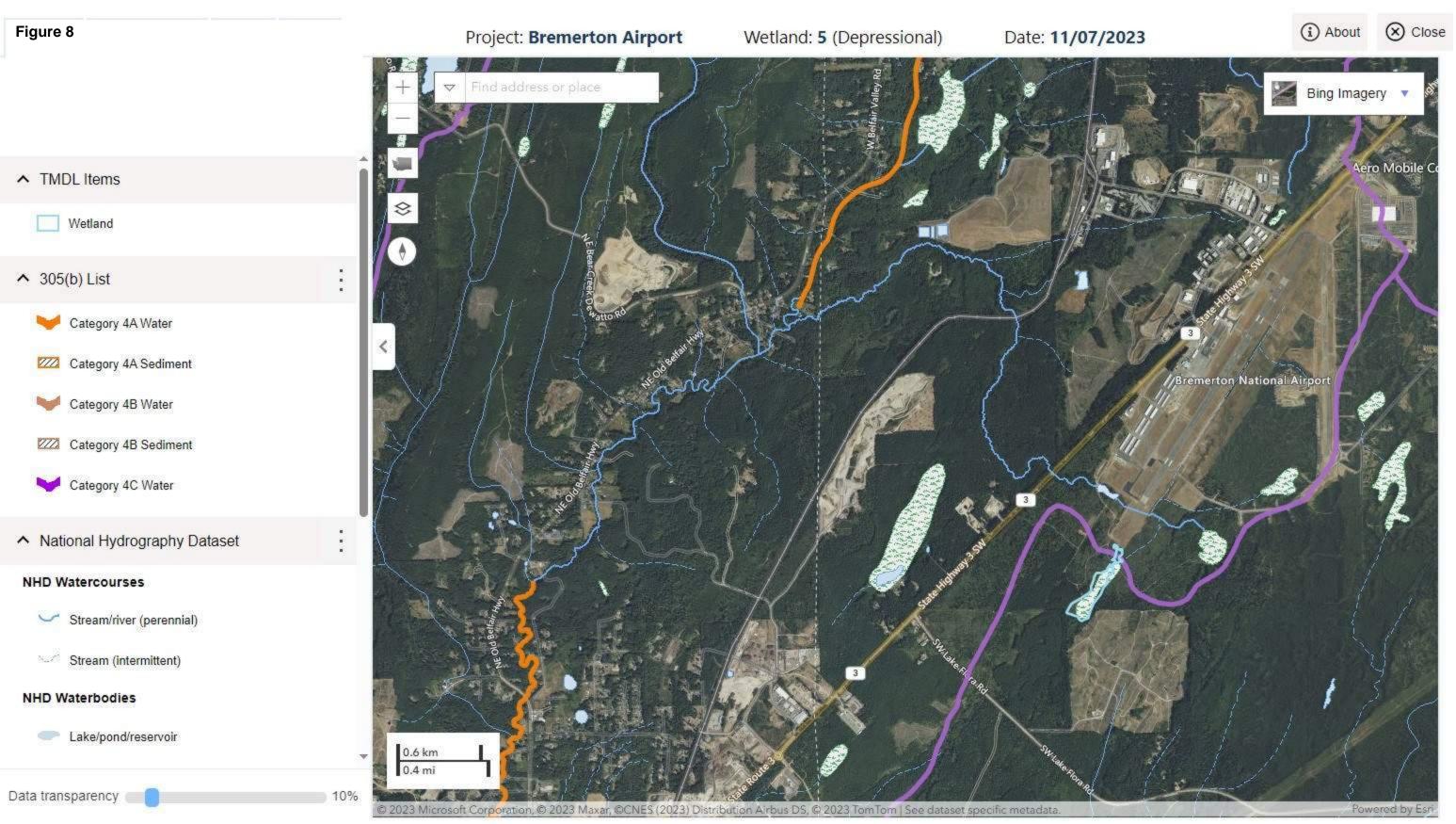
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# **RATING SUMMARY - Western Washington**

Name of wetland (or ID#): 6 Date of site visit: 10/23/2023

Rated By: Matthew Evinger Trained by Ecology? Yes [X] No [] Date of Training:

06/09/2022

**HGM Class used for rating:** Depressional **Wetland has multiple HGM classes? Yes** [] **No** [X]

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

Source of base aerial photo/map:

**OVERALL WETLAND CATEGORY:** [Category II] (based on functions [X] 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	
Site Potential	н	Н	М	
Landscape Potential	M	M	Н	
Value	Н	L	М	Total
Score Based on Ratings	8	6	7	21

# Score for each function based on three ratings (order of ratings is

(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	
Wetland of High Conservation Value	
Bog	
Forested	
Coastal Lagoon	
Interdunal	
None of the above	Not Applicable

# Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

<u>Bepressional vvedarias</u>		
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 (can be added to map of hydroperiods)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	D 2.2, D 5.2	
Map of the contributing basin	D 4.3, D 5.3	
1km Polygon: Area that extends 1km 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	

# **DEPRESSIONAL AND FLATS WETLANDS**

Water Quality Functions - Indicators that the site functions to improve water quality

Rating of Site Potential	[X] <b>12-16</b> = <b>H</b> [ ] <b>6-11</b> = <b>M</b> [ ] <b>0-5</b> = <b>L</b>	Total for D 1:  Record the rating on a	16	_
Area seasonally policed is < 23% to	otal area of wetland	·		_
Area seasonally ponded is < 25% to		points = 0	Score:	4
Area seasonally ponded is > 25% to		points = 2		
Area seasonally ponded is > 50% to		points = 4		
	of seasonal ponding or inundation in the wetland	·		_
Wetland has persistent, ungrazed p		points = 0	Score:	5
Wetland has persistent, ungrazed p		points = 1		
Wetland has persistent, ungrazed, p		points = 3		
Wetland has persistent, ungrazed, p		points = 5		
<b>D 1.3</b> What are the characteristics a	and distribution of persistent plants?			
None of the above		points = 0	Score:	4
Soil texture identified as clay or ord		points = 4		
Soil texture identified as clay or org	ganic in field	points = 4		
Mapped as true clay or organic (mu	uck or peat)	points = 4		
D 1.2 Can the soil 2in below the su	rface be identified as true clay or organic soil?			
Wetland is a flat depression whose	outlet is a permanently flowing ditch.	points = 1	Score:	3
permanently flowing		points = 1		
•	ightly constricted, surface outlet that is			
Wetland has an intermittently flowi	ng, or highly constricted, outlet.	points = 2		
Wetland has no surface water outle	t.	points = 3		
<b>D</b> 1.1 What are the characteristics of	of surface water outflows from the wetland?			

D 2.0 Does the landscape have the potential to su	upport the water quality function of the site?		
D 2.1 Does the wetland unit receive stormwater disc	charges?		
Yes	points = 1		
No	points = 0	Score:	1
D 2.2 Is > 10% of the area within 150ft of the wetlan	d in land uses that generate pollutants in surface runoff?		
Yes	points = 1		
No	points = 0	Score:	0
D 2.3 Are there septic systems within 250ft of the w	etland?		
Yes	points = 1		
No	points = 0	Score:	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	?	
Yes	points = 1		
No	points = 0	Score:	0

D 2.5 What are the other sources of pollutants coming into the wetland?	
Total for D 2:	1

Rating of Landscape Potential	[] <b>3-4</b> = <b>H</b> [X] <b>1-2</b> = <b>M</b> [] <b>0</b> = <b>L</b>	Record the rating on the first page
D 3.0 Is the water quality improveme	ent 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 points = 1

No points = 0Score: 0

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

Yes points = 1

No points = 0Score: 1

D 3.3 Has the site been identified in a watershed or local plan as important for maintaining water quality?

points = 2Yes

points = 0Score: 2 No

Total for D 3: 3

**Rating of Value** 

[X] 2-4 = H[] 1 = M[] 0 = L

Record the rating on the first page

## **DEPRESSIONAL AND FLATS WETLANDS**

Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradtion

## D 4.0 Does the site have the potential to reduce flooding and erosion?

<b>D 4.1</b> What are the characteristics of surface water outflows from the wetland?		
Wetland has no surface water outlet.	points = 4	
Wetland has an intermittently flowing, or highly constricted, outlet.	points = 2	
Wetland is a flat depression whose outlet is a permanently flowing ditch.	points = 1	
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	Score: 4
D 4.2 What is the depth of storage during the wet periods?		
Marks of ponding are 3ft or more above the surface or bottom of the outlet.	points = 7	
Marks of ponding are between 2ft to <3ft from the surface or bottom of the outlet.	points = 5	
Marks of ponding are at least 0.5ft to <2ft from the surface or the bottom of the outlet.	points = 3	
The wetland is a "headwater" wetland.	points = 3	
The wetland is flat but has small depressions on the surface that trap water.	points = 1	
Marks of ponding are less than 0.5ft (6in).	points = 0	Score: 3

D 4.3 What is the contribution of the we	tland to storage in the watershed?			
The area of the basin is less than 10 time	es the area of the unit	points = 5		
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 ti	imes the area of the unit	points = 0		
Entire wetland is in the Flats class		points = 5	Score:	5
		Total for D 4:	12	
Rating of Site Potential	[X] <b>12-16</b> = <b>H</b> [ ] <b>6-11</b> = <b>M</b> [ ] <b>0-5</b> = <b>L</b>	Record the rating on t	he first p	page
D 5.0 Does the landscape have the por	tential to support hydrologic functions of tl	ne site?		
D 5.1 Does the wetland unit receive stor	mwater discharges?			
Yes		points = 1		
No		points = 0	Score:	1
<b>D 5.2</b> <u>Is &gt;10% of the area within 150 ft or </u>	of the wetland in land uses that generate exces	ss runoff?		
Yes		points = 1		
No		points = 0	Score:	0
<b>D 5.3</b> <u>Is more than 25% of the contribut</u>	ing basin of the wetland covered with intensive	e human land uses?		
Yes		points = 1		
No		points = 0	Score:	0
		Total for D 5:	1	
Rating of Landscape Potential	[] 3 = H [X] 1-2 = M [] 0 = L	Record the rating on t	he first p	page
D 6 0 Are the hydrologic functions pro	ovided by the site valuable to society?			
- 0.0 Are the hydrologic functions pro				
D 6.1 <u>Is the wetland in a landscape that</u>	has flooding problems?			
<b>D 6.1</b> <u>Is the wetland in a landscape that</u>	has flooding problems? mediately down-gradient of the wetland.	points = 2		
<b>D 6.1</b> <u>Is the wetland in a landscape that</u>	mediately down-gradient of the wetland.	points = 2 points = 1		
<b>D 6.1</b> Is the wetland in a landscape that Flooding occurs in a sub-basin that is im	mediately down-gradient of the wetland.  pasin farther down-gradient.	'		
<b>D 6.1</b> Is the wetland in a landscape that Flooding occurs in a sub-basin that is im Surface flooding problems are in a sub-basin that is im	mediately down-gradient of the wetland.  pasin farther down-gradient.  n the basin.	points = 1 points = 1		
D 6.1 Is the wetland in a landscape that Flooding occurs in a sub-basin that is im Surface flooding problems are in a sub-basin from groundwater is an issue in	mediately down-gradient of the wetland.  pasin farther down-gradient.  n the basin.	points = 1		
D 6.1 Is the wetland in a landscape that Flooding occurs in a sub-basin that is im Surface flooding problems are in a sub-life Flooding from groundwater is an issue in The existing or potential outflow from the	mediately down-gradient of the wetland.  pasin farther down-gradient.  In the basin.  The wetland is so constrained that water	points = 1 points = 1	Score:	0
D 6.1 Is the wetland in a landscape that Flooding occurs in a sub-basin that is im Surface flooding problems are in a sub-life flooding from groundwater is an issue in The existing or potential outflow from the cannot reach areas that flood. There are no problems with flooding do	mediately down-gradient of the wetland.  pasin farther down-gradient.  In the basin.  The wetland is so constrained that water	points = 1 points = 1 points = 0 points = 0		0

**Rating of Value** 

No

[] **2-4** = **H**[] **1** = **M**[X] **0** = **L** 

Record the rating on the first page

Total for D 6:

Score: 0

0

points = 0

# **HABITAT FUNCTIONS**

**These questions apply to wetlands of all HGM classes** - Indicators that the site functions to provide important habitat

## H 1.0 Does the wetland have the potential to provide habitat for many species?

H 1.1 What is the structure of the plant community?			
Aquatic Bed			
▼ Emergent			
✓ Scrub-shrub			
Forested			
Multiple strata within the Forested class (canopy, sub-canopy, shrubs, herbaceous,			
moss/ground cover)			
4 structures or more	points = 4		
3 structures	points = 2		
2 structures	points = 1		
1 structure	points = 0		
No structures present	points = 0	Score:	1
H 1.2 What are the hydroperiods that meet the size thresholds in the wetland?			
✓ Permanently flooded or inundated			
✓ Seasonally flooded or inundated			
Occasionally flooded or inundated			
✓ Saturated only			
Permanently flowing stream or river in, or adjacent to, the wetland			
Seasonally flowing stream in, or adjacent to, the wetland			
Lake Fringe wetland			
Freshwater Tidal wetland			
4 or more types present	points = 3		
3 types present or Lake Fringe / Freshwater Tidal Fringe	points = 2		
2 types present	points = 1		
1 type present	points = 0		
None present	points = 0	Score:	2
H 1.3 What is the richness of the plant species in the wetland?			
>19 species	points = 2		
5-19 species	points = 1		
<5 species	points = 0	Score:	1

H 1.4 What is the interspersion of habitats?		
High	points = 3	
Moderate	points = 2	
Low	points = 1	
None	points = 0	Score: 1
H 1.5 What are the special habitat features in the wetland?		
✓ Large, downed, woody debris within the wetland (>4in diameter and 6ft long).		
✓ Standing snags (dbh >4in) within the wetland		
Undercut banks are present for at least 6.6ft (2m) and/or overhanging plants		
extend at least 3.3ft (1m) over open water or a stream (or ditch) in, or contiguous with		
the wetland, for at least 33ft (10m)		
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 (cut shrubs		
or trees that have not yet weathered where wood is exposed)		
At least 0.25ac of thin-stemmed persistent plants or woody branches are present		
in areas that are permanently or seasonally inundated (structures for egg-laying by		
amphibians)		
✓ Invasive plants cover less than 25% of the wetland area in every stratum of plants		
(see H 1.1 for list of strata)		
6 habitats selected	points = 6	
5 habitats selected	points = 5	
4 habitats selected	points = 4	
3 habitats selected	points = 3	
2 habitats selected	points = 2	
1 habitat selected	points = 1	
No habitats selected	points = 0	Score: 4
	Total for H 1:	9

**Rating of Site Potential** 

[ ] 15-18 = H [X] 7-14 = M [ ] 0-6 = L

Record the rating on the first page

## H 2.0 Does the landscape have the potential to support habitat functions of the site?

H 2.1 What is the percentage of accessible habitat within 1km of the wetland?		
>33% of 1km Polygon	points = 3	
20-33% of 1km Polygon	points = 2	
10-19% of 1km Polygon	points = 1	
<10% of 1km Polygon	points = 0	Score: 3
H 2.2 What is the percentage of total habitat in a 1km polygon around the wetland?		
Total habitat is >50% of the Polygon	points = 3	
Total habitat is 10-50% of the Polygon and in 1-3 patches	points = 2	
Total habitat is 10-50% of the Polygon and in >3 patches	points = 1	
Total habitat is <10% of the Polygon	points = 0	Score: 3

Wetland		

points = -2	
points = 0	Score: 0
Total for H 2:	6
	points = 0

**Rating of Landscape Potential** 

[X] **4-6** = **H** [ ] **1-3** = **M** [ ] **0** = **L** 

Record the rating on the first page

## H 3.0 Is the habitat provided by the site valuable to society?

Total for H 3:	1	
The site does not meet any of the criteria for societal value points = 0	core:	1
The site has 1 or 2 WDFW priority habitats within 100m points = 1		
for societal value		
The wetland has 3 or more WDFW priority habitats within 100m, or meets the criteria points = 2		
The wetland has been categorized as an important habitat site in a local plan		
The wetland is a Wetland of High Conservation Value		
The wetland is mapped as a location for an individual WDFW priority species		
The wetland provides habitat for Threatened or Endangered species		
The following criteria automatically score 2 points:		
Talus		
✓ Snags and Logs		
Cliffs		
Caves		
Nearshore (Coastal, Open Coast, Puget Sound)		
Instream		
Fresh Deepwater		
Westside Prarie		
Riparian		
Oregon White Oak		
Old-growth/Mature Forests		
Herbaceous Balds		
Biodiversity Areas and Corridors		
Aspen Stands		
H 3.1 Does the site provide habitat for species valued in laws, regulations, or policies?		

**Rating of Value** 

[] 2 = H [X] 1 = M [] 0 = L

Record the rating on the first page

# **CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS**

### **SC 1.0 Estuarine Wetlands**

SC 1.1 Does the wetland meet all of the following criteria for Estuarine wetlands?  The dominant water regime is tidal  The wetland is vegetated  The water salinity is greater than 0.5 ppt	
Yes - Go to SC 1.2	
No - Not an Estuarine Wetland	Result: Not an Estuarine Wetland
SC 1.2 <u>Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, National Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-1513</u>	
Yes - Category I Estuarine Wetland No - Go to SC 1.3	Result:
SC 1.3 Is the wetland unit at least 1ac in size and meets at least two of the following three condition.  The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 10% cover of non-native plant species.  At least 75% of the landward edge of the wetland has a 100ft buffer of shrub, forest, or ungrazed or un-mowed grassland  The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.	ons?
Yes - Category I Estuarine Wetland No - Category II Estuarine Wetland	Result:
SC 2.0 Wetlands of High Conservation Value	
SC 2.1 Does the wetland overlap with any known or historical rare plant or rare & high-quality eco WNHP Data Explorer?	osystem polygons on the
Yes - Category I Wetland of High Conservation Value No - Go to SC 2.2	Result: Go to SC 2.2
SC 2.2 Does the wetland have a rare plant species, rare plant community, or high-quality common may qualify the site as a WHCV?	plant community that
Yes - Category I Wetland of High Conservation Value	
No - Not a Wetland of High Conservation Value	Result: Not a Wetland of High Conservation Value

SC 3.0 Bogs	
SC 3.1 Does an area within the wetland unit have organic soil horizons, either peats or mucks,	that compose 16in or more
of the first 32in of the soil profile?	
Yes - Go to SC 3.3	
No - Go to SC 3.2	Result: Go to SC 3.2
SC 3.2 Does an area within the wetland unit have organic soils, either peats or mucks, that are	eless than 16 in deep over
bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of	of a lake or pond?
Yes - Go to SC 3.3	
No - Not a Bog Wetland	Result: Not a Bog
The Thota bog Wetland	Wetland
SC 3.3 Does an area with peats or mucks have more than 70% cover of mosses at ground leve	el, AND at least 30% cover of
plant species listed in the table provided in the instructions?	
Yes - Category I Bog Wetland	
No - Go to SC 3.4	Result:
SC 3.4 <u>Is an area with peats or mucks forested (&gt;30% cover) with Sitka spruce, subalpine fir, was the second spruce of the second spru</u>	vestern red cedar, western
hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of	of the species (or
combinations of species) listed in the table found in the instructions provide more than 30% of	of the cover under the
<u>canopy?</u>	
Yes - Category I Bog Wetland	
No - Not a Bog Wetland	Result:
SC 4.0 Forested Wetlands	
SC 4.1 Does the wetland have at least 1 contiguous acre of forest that meets one of the follow	ving criteria?
Old-growth forests	
Mature forests	

**Result: Not a Forested** 

Wetland

Wetland name or number: 6

No - Not a Forested Wetland

## **SC 5.0 Wetlands in Coastal Lagoons**

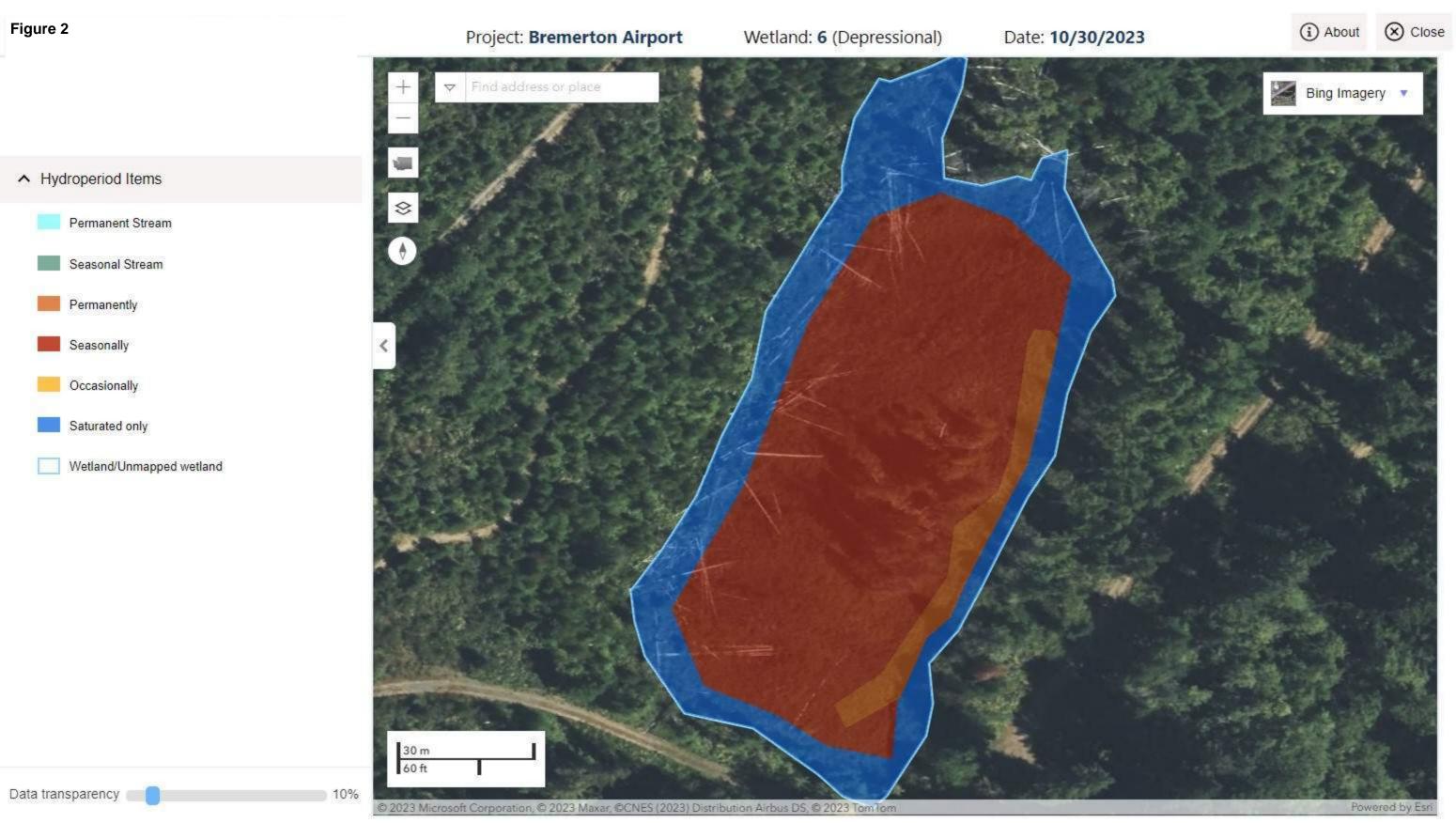
SC 5.1 Coastal Lagoons: Does the wetland meet all of the following criteria of a wetland in a coastal three wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by some leading three waters.	_
from marine waters by sandbanks, gravel banks, shingle, or rocks	
The depression in which the wetland is located contains ponded water that is saline or brackis	h
(>0.5 ppt) during most of the year in at least a portion of the open water area (measured near the	
bottom)	
Yes - Go to SC 5.2	
	Result: Not a Coastal
No - Not a Coastal Lagoon Wetland	
	Lagoon Wetland
SC 5.2 Does the wetland meet all of the following three conditions?	
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).	
At least 75% of the landward edge of the wetland has a 100ft buffer of shrub, forest, or un-	
grazed or un-mowed grassland.	
the wetland is larger than 0.10ac (4350 sqft)	
the wettand is larger than 6.10de (4550 sqrt)	
Vac. Catagory I Capatal Largan	
Yes - Category I Coastal Lagoon	
No - Category II Coastal Lagoon	Result:
SC 6.0 Interdunal Wetlands	
SC 6.1 Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownersh	ip WBUO)?
Yes - Go to SC 6.2	
	Result: Not an
No - Not an Interdunal Wetland	Interdunal Wetland
	interdunai wetiand
SC 6.2 <u>Is the wetland 1ac or larger in size, or a mosaic that is 1ac or larger in size?</u>	
Wetland is larger than 1ac in size - Go to SC 6.3	
Wetland is a mosaic larger than 1ac is size - Category II Interdunal Wetland	
No - Go to SC 6.4	Result:
SC 6.3 Does the wetland score 8 or 9 points for the habitat functions?	
Does the wetland score of 5 points for the habitat functions:	
Vac. Catagory I Intend up a Matley d	
	- 12
No - Category II Interdunal Wetland	Result:
No - Category II Interdunal Wetland  SC 6.4 Is the wetland unit between 0.1ac and 1ac, or in a mosaic of wetlands that is between 0.1ac	
Wetland is a mosaic larger than 1ac is size - Category II Interdunal Wetland No - Go to SC 6.4  SC 6.3 Does the wetland score 8 or 9 points for the habitat functions?  Yes - Category I Interdunal Wetland	Result:

# **Category of wetland based on Special Characteristics**

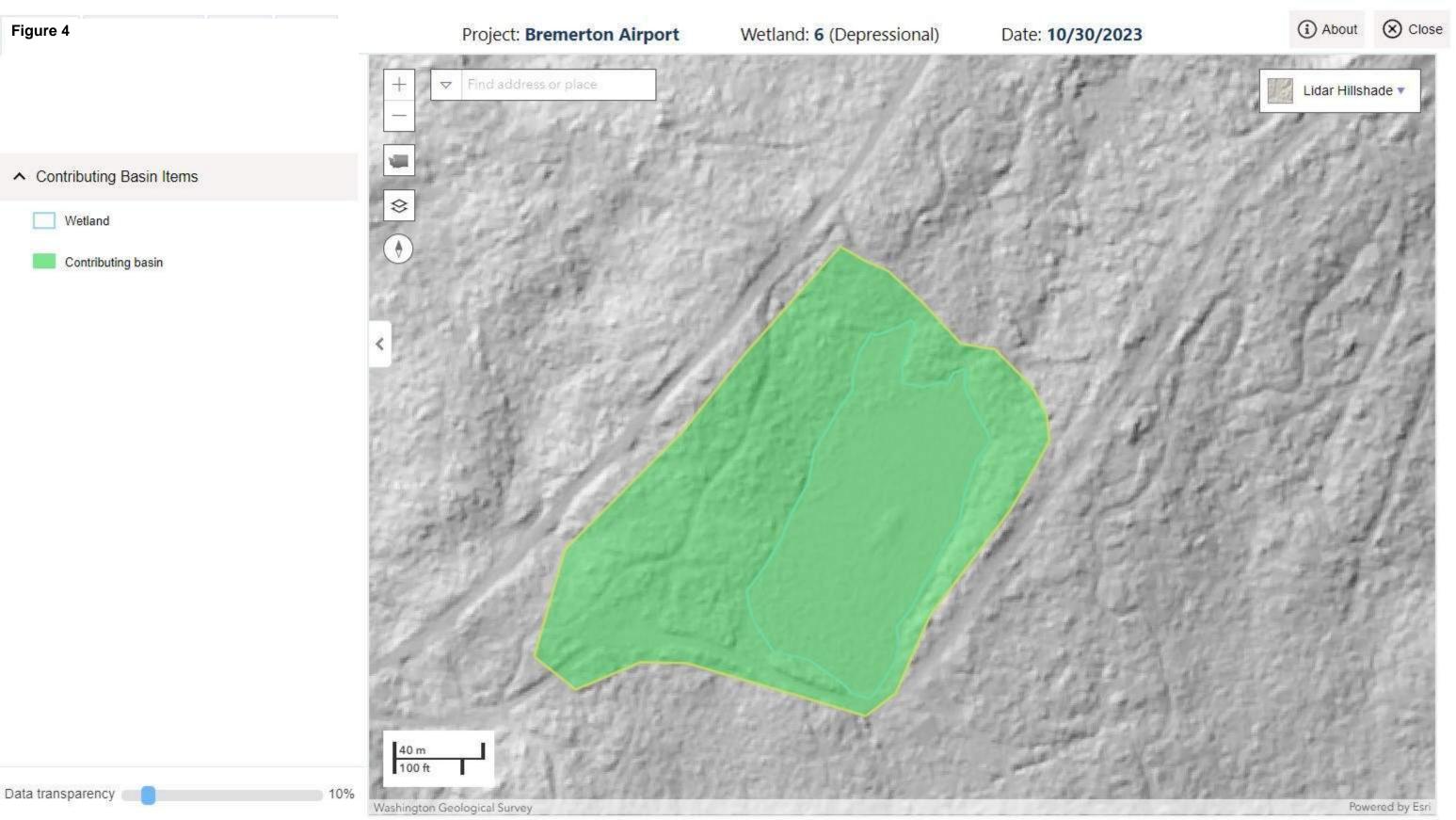
If you answered No for all types, enter "Not Applicable" on Summary Form

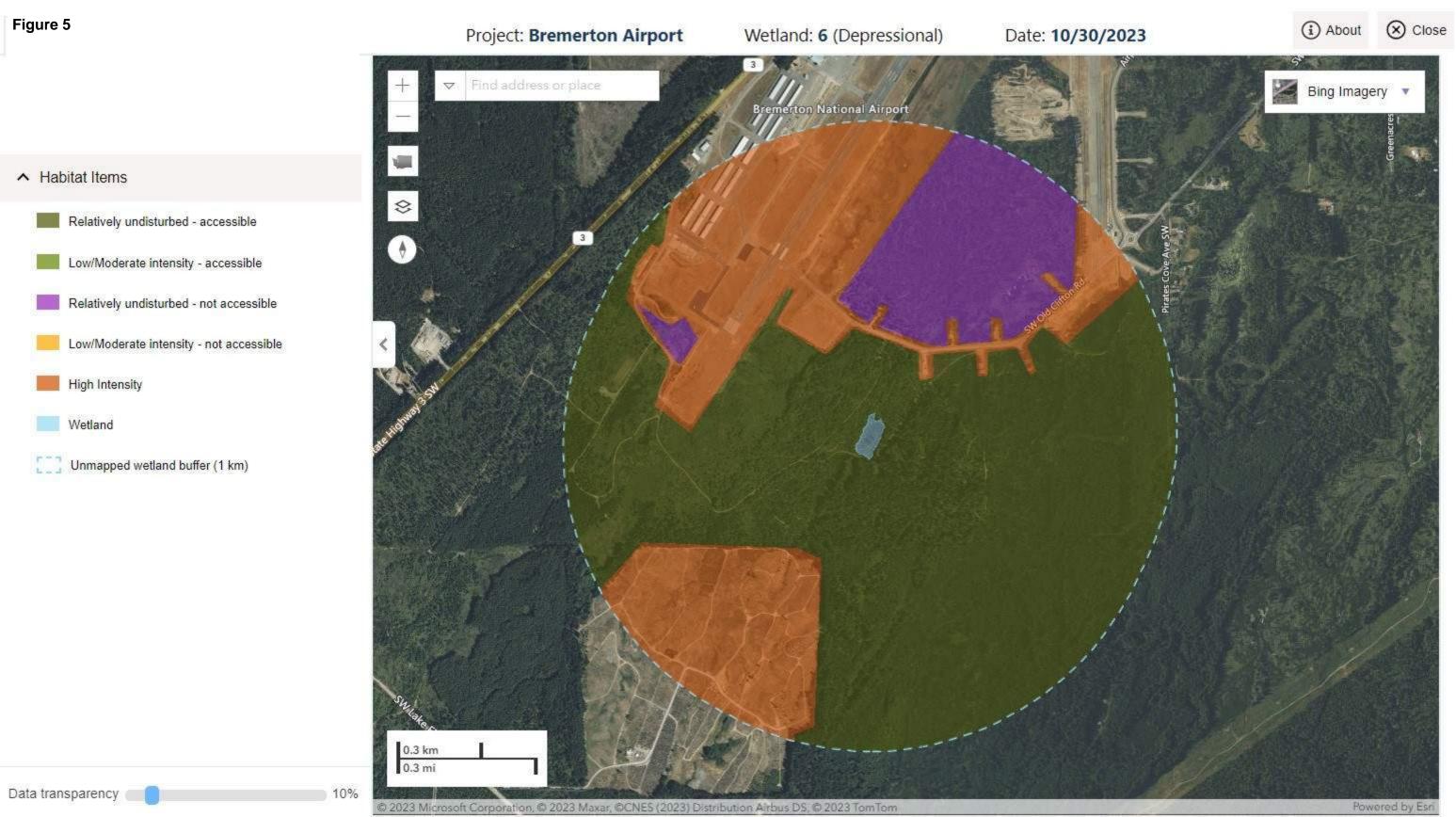
Final Category: Not Applicable

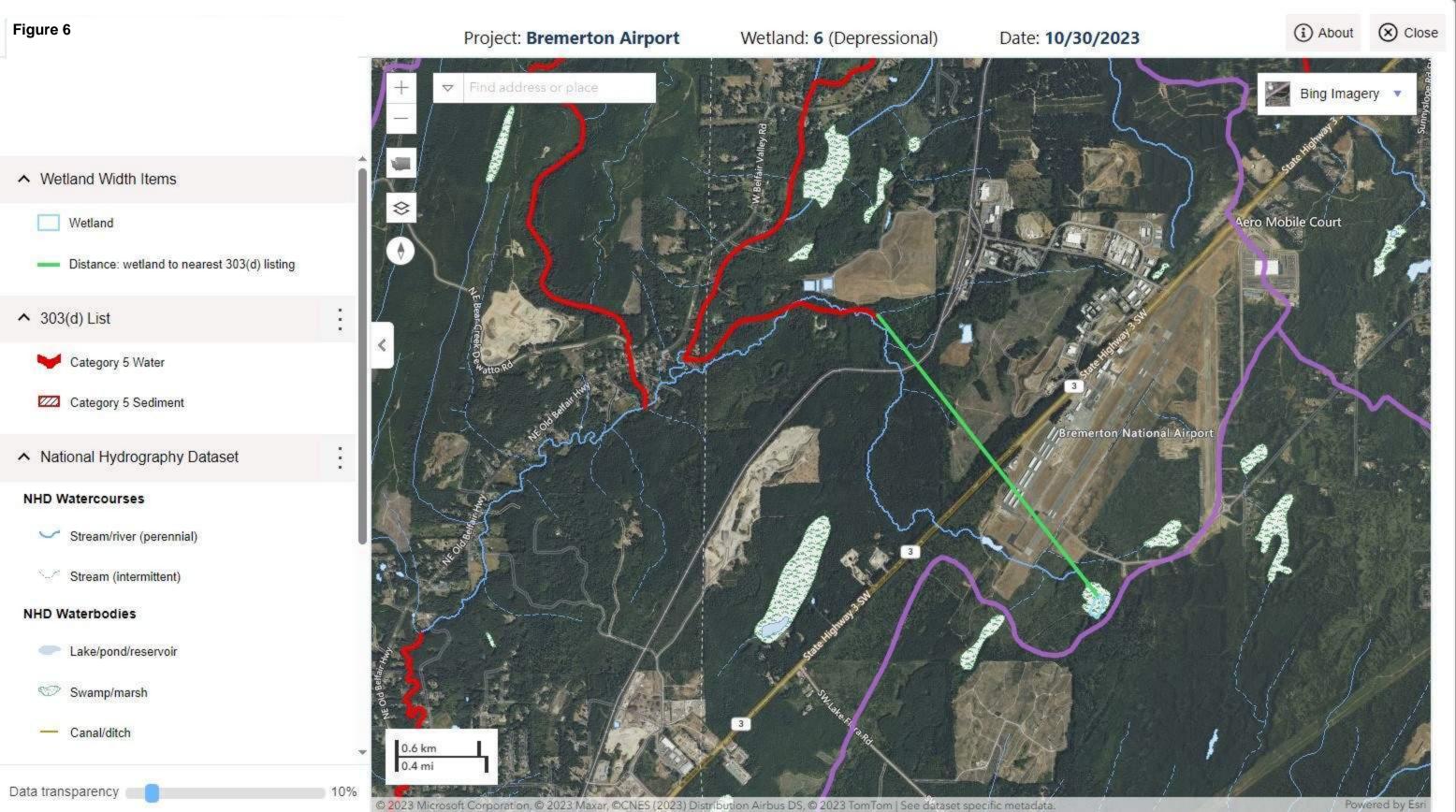


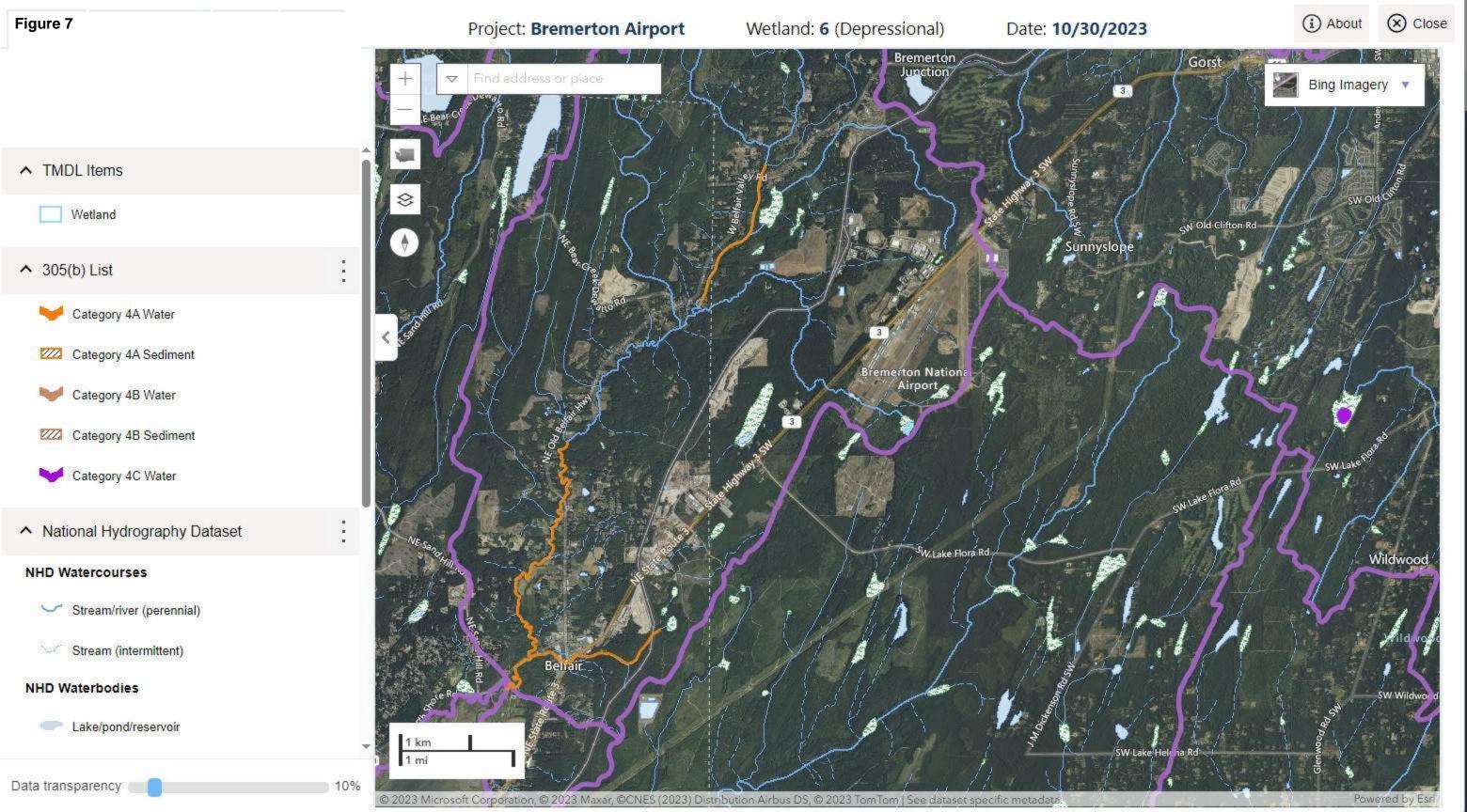












# **RATING SUMMARY - Western Washington**

Name of wetland (or ID#): 7 Date of site visit: 10/23/2023

Rated By: Matthew Evinger Trained by Ecology? Yes [X] No [] Date of Training:

06/09/2022

**HGM Class used for rating:** Depressional **Wetland has multiple HGM classes? Yes** [] **No** [X]

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

**OVERALL WETLAND CATEGORY: [Category III]** (based on functions [X] 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

Score Based on Ratings	8	6	5	19
Value	Н	L	L	Total
Landscape Potential	M	М	Н	
Site Potential	Н	Н	L	
IFUNCTION	Improving Water Quality	Hydrologic	Habitat	

# 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	
Wetland of High Conservation Value	
Bog	
Forested	
Coastal Lagoon	
Interdunal	
None of the above	Not Applicable

# Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

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 (can be added to map of hydroperiods)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	D 2.2, D 5.2	
Map of the contributing basin	D 4.3, D 5.3	
1km Polygon: Area that extends 1km 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	

# **DEPRESSIONAL AND FLATS WETLANDS**

Water Quality Functions - Indicators that the site functions to improve water quality

Rating of Site Potential	[X] <b>12-16</b> = <b>H</b> [ ] <b>6-11</b> = <b>M</b> [ ] <b>0-5</b> = <b>L</b>	Record the rating on		
71		Total for D 1:	14	
Area seasonally ponded is < 25% to		points = 0	Score:	2
Area seasonally ponded is > 25% to		points = 2		
Area seasonally ponded is > 50% to		points = 4		
<b>D 1.4</b> What are the characteristics	of seasonal ponding or inundation in the wetlan	d area?		
Wetland has persistent, ungrazed p	plants < 10% of area	points = 0	Score:	5
Wetland has persistent, ungrazed p	plants > 10% of area	points = 1		
Wetland has persistent, ungrazed,	olants > 50% of area	points = 3		
Wetland has persistent, ungrazed, ¡	olants > 95% of area	points = 5		
<b>D 1.3</b> What are the characteristics	and distribution of persistent plants?			
None of the above		points = 0	Score:	4
Soil texture identified as clay or org	ganic by laboratory test	points = 4		
Soil texture identified as clay or org	ganic in field	points = 4		
Mapped as true clay or organic (mi	uck or peat)	points = 4		
D 1.2 Can the soil 2in below the su	rface be identified as true clay or organic soil?			
Wetland is a flat depression whose	outlet is a permanently flowing ditch.	points = 1	Score:	3
permanently flowing		points = 1		
Wetland has an unconstricted, or sl	lightly constricted, surface outlet that is			
Wetland has an intermittently flowi	ng, or highly constricted, outlet.	points = 2		
Wetland has no surface water outle	et.	points = 3		
<b>D 1.1</b> What are the characteristics of	of surface water outflows from the wetland?			

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 discharg	es?		
Yes	points = 1		
No	points = 0	Score:	1
D 2.2 Is >10% of the area within 150ft of the wetland in I	and uses that generate pollutants in surface runoff?		
Yes	points = 1		
No	points = 0	Score:	0
D 2.3 Are there septic systems within 250ft of the wetlan	<u>d?</u>		
Yes	points = 1		
No	points = 0	Score:	0
D 2.4 Are there other sources of pollutants coming into t	he wetland that are not listed in questions D 2.1-D 2.3?		
Yes	points = 1		
No	points = 0	Score:	0

D 2.5 What are the other sources of pollutants coming into the wetland?				
		Total for D 2:	1	
Pating of Landscape Potential	[] 2 4 - H [V] 1 2 - M [] 0 - I	Posard the rating on t	ho first nago	

Rating of Landscape Potential	[] <b>3-4 = H</b> [X] <b>1-2 = M</b> [] <b>0 = L</b>	Record the rating o	n the first page
D 3.0 Is the water quality improvement	ent provided by the site valuable to society?	?	
D 3.1 Does the wetland discharge dire	ectly (i.e., within 1 mi) to a stream, river, lake, or	marine water that is on	the 303(d)
list?			
Yes		points = 1	
No		points = 0	Score: 0
D 3.2 Is the wetland in a basin or sub-	basin where an aquatic resource is on the 303(	d) list?	
Yes		points = 1	
No		points = 0	Score: 1
D 3.3 Has the site been identified in a	watershed or local plan as important for maint	aining water quality?	
Yes		points = 2	
No		points = 0	Score: 2

**Rating of Value** 

[X] 2-4 = H[] 1 = M[] 0 = L

Record the rating on the first page

3

Total for D 3:

# **DEPRESSIONAL AND FLATS WETLANDS**

**Hydrologic Functions** - Indicators that the site functions to reduce flooding and stream degradtion

### D 4.0 Does the site have the potential to reduce flooding and erosion?

<b>D 4.1</b> What are the characteristics of surface water outflows from the wetland?		
Wetland has no surface water outlet.	points = 4	
Wetland has an intermittently flowing, or highly constricted, outlet.	points = 2	
Wetland is a flat depression whose outlet is a permanently flowing ditch.	points = 1	
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	Score: 4
D 4.2 What is the depth of storage during the wet periods?		
Marks of ponding are 3ft or more above the surface or bottom of the outlet.	points = 7	
Marks of ponding are between 2ft to <3ft from the surface or bottom of the outlet.	points = 5	
Marks of ponding are at least 0.5ft to <2ft from the surface or the bottom of the outlet.	points = 3	
The wetland is a "headwater" wetland.	points = 3	
The wetland is flat but has small depressions on the surface that trap water.	points = 1	
Marks of ponding are less than 0.5ft (6in).	points = 0	Score: 3

Wetland name or number: 7				
D 4.3 What is the contribution of the	wetland to storage in the watershed?			
The area of the basin is less than 10 t	times the area of the unit	points = 5		
The area of the basin is 10 to 100 time	nes the area of the unit	points = 3		
The area of the basin is more than 10	00 times the area of the unit	points = 0		
Entire wetland is in the Flats class		points = 5	Score:	5
		Total for D 4:	12	
Rating of Site Potential	[X] <b>12-16</b> = <b>H</b> [ ] <b>6-11</b> = <b>M</b> [ ] <b>0-5</b> = <b>L</b>	Record the rating on t	the first p	pag
D 5.0 Does the landscape have the	potential to support hydrologic functions of t	the site?		
D 5.1 Does the wetland unit receive s	stormwater discharges?			
Yes		points = 1		
No		points = 0	Score:	1
<b>D 5.2</b> <u>Is &gt;10% of the area within 150</u>	ft of the wetland in land uses that generate exce	ss runoff?		
Yes		points = 1		
No		points = 0	Score:	0
D 5.3 Is more than 25% of the contri	buting basin of the wetland covered with intensiv	ve human land uses?		
Yes		points = 1		
No		points = 0	Score:	0
		Total for D 5:	1	
Rating of Landscape Potential	[] 3 = H [X] 1-2 = M [] 0 = L	Record the rating on t	the first p	oag
D 6.0 Are the hydrologic functions	provided by the site valuable to society?			
D 6.1 Is the wetland in a landscape to	hat has flooding problems?			
Flooding occurs in a sub-basin that is	s immediately down-gradient of the wetland.	points = 2		
Surface flooding problems are in a su	ub-basin farther down-gradient.	points = 1		
Flooding from groundwater is an issu	ue in the basin.	points = 1		
The existing or potential outflow fror	n the wetland is so constrained that water	points = 0		
cannot reach areas that flood.		μοιπις = υ		
There are no problems with flooding	downstream of the wetland.	points = 0	Score:	0
D 6.2 Has the site been identified as	important for flood storage or flood conveyance	in a regional flood contro	ol plan?	
Yes		points = 2		
No		points = 0	Score:	0

**Rating of Value** 

[] **2-4** = **H**[] **1** = **M**[X] **0** = **L** 

Record the rating on the first page

Total for D 6:

0

# **HABITAT FUNCTIONS**

**These questions apply to wetlands of all HGM classes** - Indicators that the site functions to provide important habitat

### H 1.0 Does the wetland have the potential to provide habitat for many species?

H 1.1 What is the structure of the plant community?			
Aquatic Bed			
Emergent			
✓ Scrub-shrub			
Forested			
Multiple strata within the Forested class (canopy, sub-canopy, shrubs, herbaceous,			
moss/ground cover)			
4 structures or more	points = 4		
3 structures	points = 2		
2 structures	points = 1		
1 structure	points = 0		
No structures present	points = 0	Score:	0
H 1.2 What are the hydroperiods that meet the size thresholds in the wetland?			
✓ Permanently flooded or inundated			
Seasonally flooded or inundated			
Occasionally flooded or inundated			
Saturated only			
Permanently flowing stream or river in, or adjacent to, the wetland			
Seasonally flowing stream in, or adjacent to, the wetland			
Lake Fringe wetland			
Freshwater Tidal wetland			
4 or more types present	points = 3		
3 types present or Lake Fringe / Freshwater Tidal Fringe	points = 2		
2 types present	points = 1		
1 type present	points = 0		
None present	points = 0	Score:	2
H 1.3 What is the richness of the plant species in the wetland?			
>19 species	points = 2		
5-19 species	points = 1		
<5 species	points = 0	Score:	0

H 1.4 What is the interspersion of habitats?			
High	points = 3		
Moderate	points = 2		
Low	points = 1		
None	points = 0	Score:	0
H 1.5 What are the special habitat features in the wetland?			
✓ Large, downed, woody debris within the wetland (>4in diameter and 6ft long).			
Standing snags (dbh >4in) within the wetland			
Undercut banks are present for at least 6.6ft (2m) and/or overhanging plants			
extend at least 3.3ft (1m) over open water or a stream (or ditch) in, or contiguous with			
the wetland, for at least 33ft (10m)			
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 (cut shrubs			
or trees that have not yet weathered where wood is exposed)			
✓ At least 0.25ac of thin-stemmed persistent plants or woody branches are present			
in areas that are permanently or seasonally inundated (structures for egg-laying by			
amphibians)			
✓ Invasive plants cover less than 25% of the wetland area in every stratum of plants			
(see H 1.1 for list of strata)			
6 habitats selected	points = 6		
5 habitats selected	points = 5		
4 habitats selected	points = 4		
3 habitats selected	points = 3		
2 habitats selected	points = 2		
1 habitat selected	points = 1		
No habitats selected	points = 0	Score:	3
	Total for H 1:	5	

**Rating of Site Potential** 

[] 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 habitat functions of the site?

H 2.1 What is the percentage of accessible habitat within 1km of the wetland?		
>33% of 1km Polygon	points = 3	
20-33% of 1km Polygon	points = 2	
10-19% of 1km Polygon	points = 1	
<10% of 1km Polygon	points = 0	Score: 3
H 2.2 What is the percentage of total habitat in a 1km polygon around the wetland?		
Total habitat is >50% of the Polygon	points = 3	
Total habitat is 10-50% of the Polygon and in 1-3 patches	points = 2	
Total habitat is 10-50% of the Polygon and in >3 patches	points = 1	
Total habitat is <10% of the Polygon	points = 0	Score: 3

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H 2.3 What is the land use intensity in the 1km polygon?			
50% of the Polygon is high intensity land use	points = -2		
<50% of the Polygon is high intensity land use	points = 0	Score:	0
	Total for H 2:	6	

**Rating of Landscape Potential** 

[X] **4-6** = **H** [ ] **1-3** = **M** [ ] **0** = **L** 

Record the rating on the first page

## H 3.0 Is the habitat provided by the site valuable to society?

	Total for H 3:	0	
The site does not meet any of the criteria for societal value	points = 0	Score:	0
The site has 1 or 2 WDFW priority habitats within 100m	points = 1		
for societal value	·		
The wetland has 3 or more WDFW priority habitats within 100m, or meets the criteria	points = 2		
The wetland has been categorized as an important habitat site in a local plan			
The wetland is a Wetland of High Conservation Value			
The wetland is mapped as a location for an individual WDFW priority species			
The wetland provides habitat for Threatened or Endangered species			
The following criteria automatically score 2 points:			
Talus			
Snags and Logs			
Cliffs			
Caves			
Nearshore (Coastal, Open Coast, Puget Sound)			
Instream			
Fresh Deepwater			
Westside Prarie			
Riparian			
Oregon White Oak			
Old-growth/Mature Forests			
Herbaceous Balds			
Biodiversity Areas and Corridors			
Aspen Stands			
H 3.1 Does the site provide habitat for species valued in laws, regulations, or policies?			

**Rating of Value** 

[] 2 = H[] 1 = M[X] 0 = L

Record the rating on the first page

# **CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS**

### **SC 1.0 Estuarine Wetlands**

SC 1.1 Does the wetland meet all of the following criteria for Estuarine wetlands?  The dominant water regime is tidal  The wetland is vegetated  The water salinity is greater than 0.5 ppt	
Yes - Go to SC 1.2	
No - Not an Estuarine Wetland	Result: Not an Estuarine Wetland
SC 1.2 <u>Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, National Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-1513</u>	
Yes - Category I Estuarine Wetland No - Go to SC 1.3	Result:
SC 1.3 Is the wetland unit at least 1ac in size and meets at least two of the following three condition.  The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 10% cover of non-native plant species.  At least 75% of the landward edge of the wetland has a 100ft buffer of shrub, forest, or ungrazed or un-mowed grassland  The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.	ons?
Yes - Category I Estuarine Wetland No - Category II Estuarine Wetland	Result:
SC 2.0 Wetlands of High Conservation Value	
SC 2.1 Does the wetland overlap with any known or historical rare plant or rare & high-quality eco WNHP Data Explorer?	osystem polygons on the
Yes - Category I Wetland of High Conservation Value No - Go to SC 2.2	Result: Go to SC 2.2
SC 2.2 Does the wetland have a rare plant species, rare plant community, or high-quality common may qualify the site as a WHCV?	plant community that
Yes - Category I Wetland of High Conservation Value	
No - Not a Wetland of High Conservation Value	Result: Not a Wetland of High Conservation Value

SC 3.0 Bogs	
SC 3.1 Does an area within the wetland unit have organic soil horizons, either peats of	or mucks, that compose 16in or more
of the first 32in of the soil profile?	
Yes - Go to SC 3.3	
No - Go to SC 3.2	Result: Go to SC 3.2
SC 3.2 Does an area within the wetland unit have organic soils, either peats or mucks	·
bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating	on top of a lake or pond?
Yes - Go to SC 3.3	
No - Not a Bog Wetland	Result:
SC 3.3 Does an area with peats or mucks have more than 70% cover of mosses at gro	ound level, AND at least 30% cover of
plant species listed in the table provided in the instructions?	
Yes - Category I Bog Wetland	
No - Go to SC 3.4	Result:
SC 3.4 <u>Is an area with peats or mucks forested (&gt;30% cover) with Sitka spruce, subalp</u>	
hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine A	
combinations of species) listed in the table found in the instructions provide more that	an 30% of the cover under the
<u>canopy?</u>	
Vac Catagory I Ban Watland	
Yes - Category I Bog Wetland	Result:
No - Not a Bog Wetland	Result:
SC 4.0 Forested Wetlands	
SC 4.1 Does the wetland have at least 1 contiguous acre of forest that meets one of t	he following criteria?
Old-growth forests	
Mature forests	
Yes - Category I Forested Wetland	
	Result: Not a Forested

Wetland

Wetland name or number: 7

No - Not a Forested Wetland

## **SC 5.0 Wetlands in Coastal Lagoons**

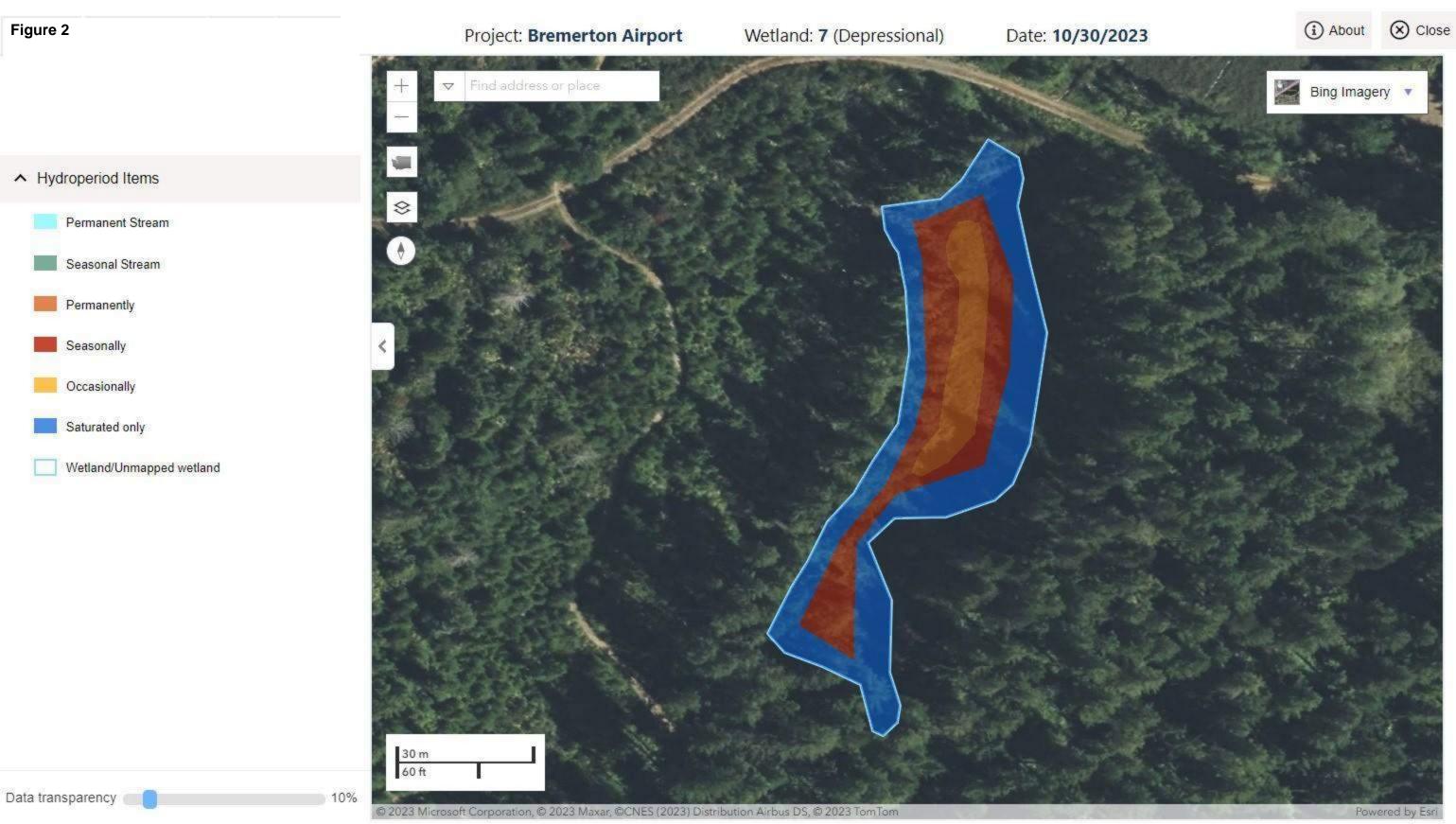
SC 5.1 Coastal Lagoons: Does the wetland meet all of the following criteria of a wetland in a coast	tal lagoon?	
The wetland lies in a depression adjacent to marine waters that is wholly or partially separated		
from marine waters by sandbanks, gravel banks, shingle, or rocks		
The depression in which the wetland is located contains ponded water that is saline or brackisl	n	
(>0.5  ppt) during most of the year in at least a portion of the open water area (measured near the		
bottom)		
Yes - Go to SC 5.2		
No - Not a Coastal Lagoon Wetland	Result: Not a Coastal	
Not a Coastal Eagoon Wetland	Lagoon Wetland	
SC 5.2 Does the wetland meet all of the following three conditions?		
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).		
At least 75% of the landward edge of the wetland has a 100ft buffer of shrub, forest, or un-		
grazed or un-mowed grassland.		
the wetland is larger than 0.10ac (4350 sqft)		
Yes - Category I Coastal Lagoon		
No - Category II Coastal Lagoon	Result:	
SC 6.0 Interdunal Wetlands		
SC 6.1 Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownersh	ip WBUO)?	
Yes - Go to SC 6.2		
No. Not an intendimed Watland	Result: Not an	
No - Not an Interdunal Wetland	Interdunal Wetland	
SC 6.2 Is the wetland 1ac or larger in size, or a mosaic that is 1ac or larger in size?		
Wetland is larger than 1ac in size - Go to SC 6.3		
Wetland is a mosaic larger than 1ac is size - Category II Interdunal Wetland		
No - Go to SC 6.4	Result:	
SC 6.3 Does the wetland score 8 or 9 points for the habitat functions?		
Yes - Category I Interdunal Wetland		
No - Category II Interdunal Wetland	Result:	
SC 6.4 Is the wetland unit between 0.1ac and 1ac, or in a mosaic of wetlands that is between 0.1ac	c and 1ac in size?	
Yes - Category III Interdunal Wetland		
No - Category IV Interdunal Wetland	Result:	

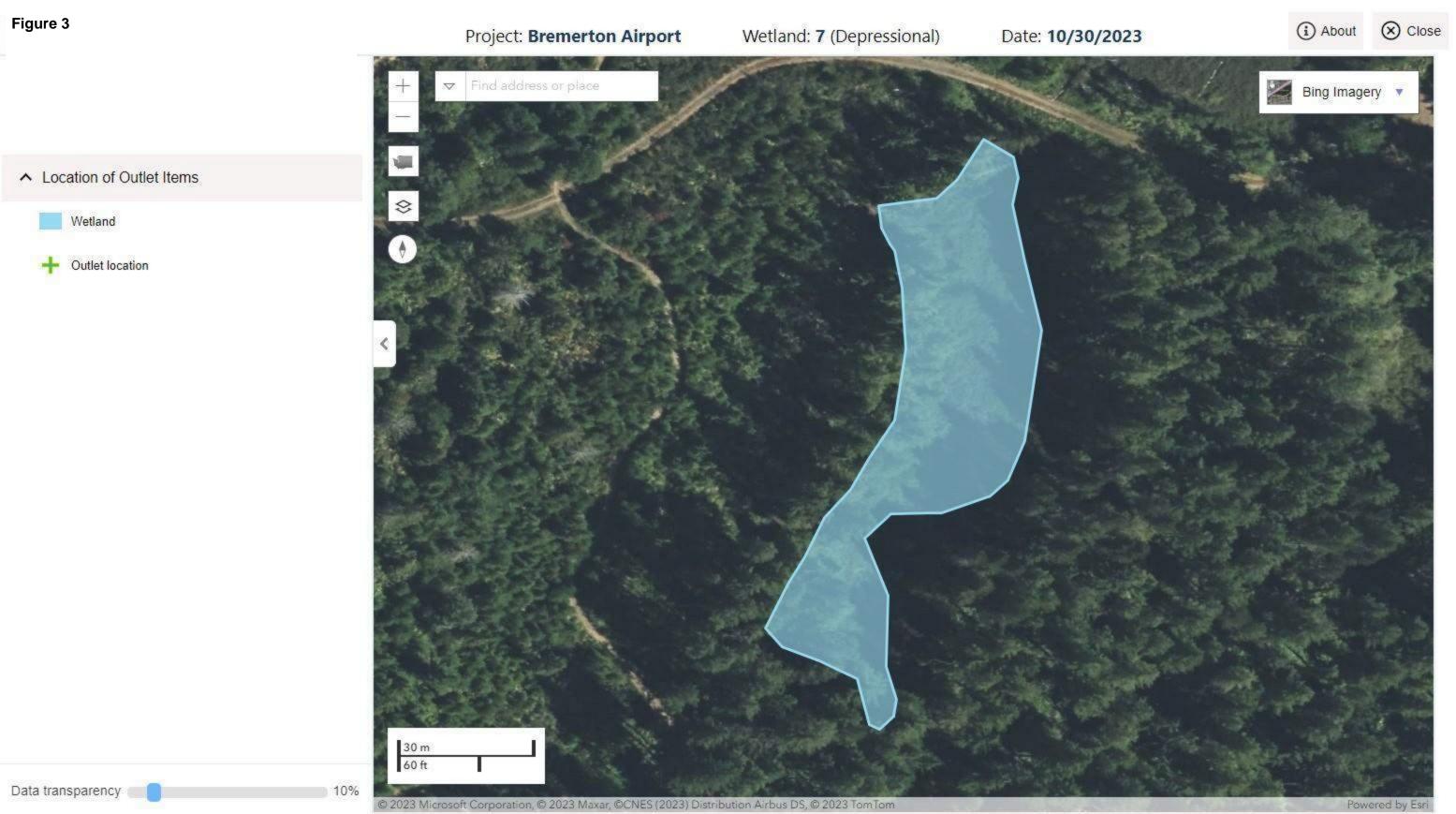
## **Category of wetland based on Special Characteristics**

If you answered No for all types, enter "Not Applicable" on Summary Form

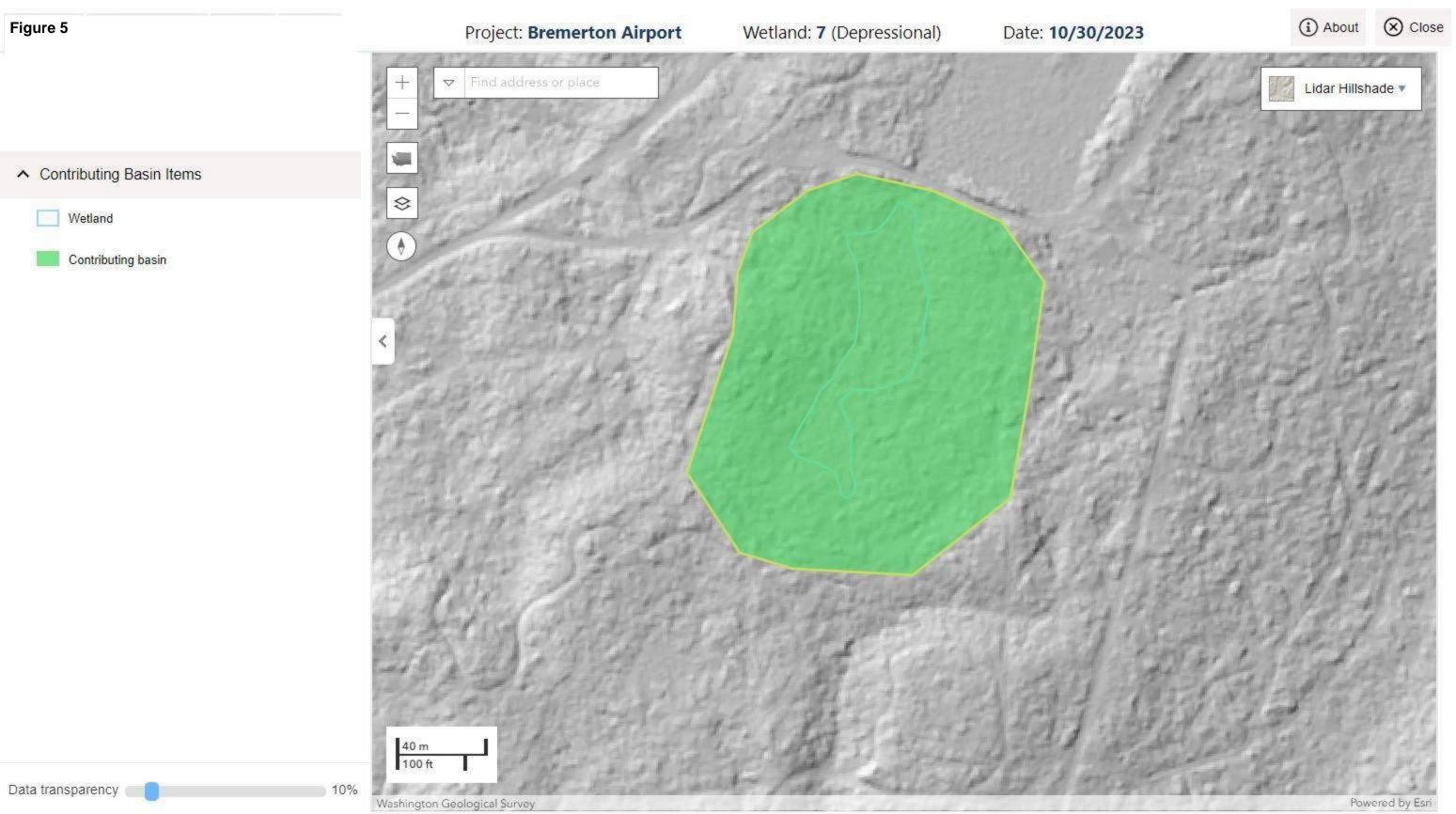
Final Category: Not Applicable

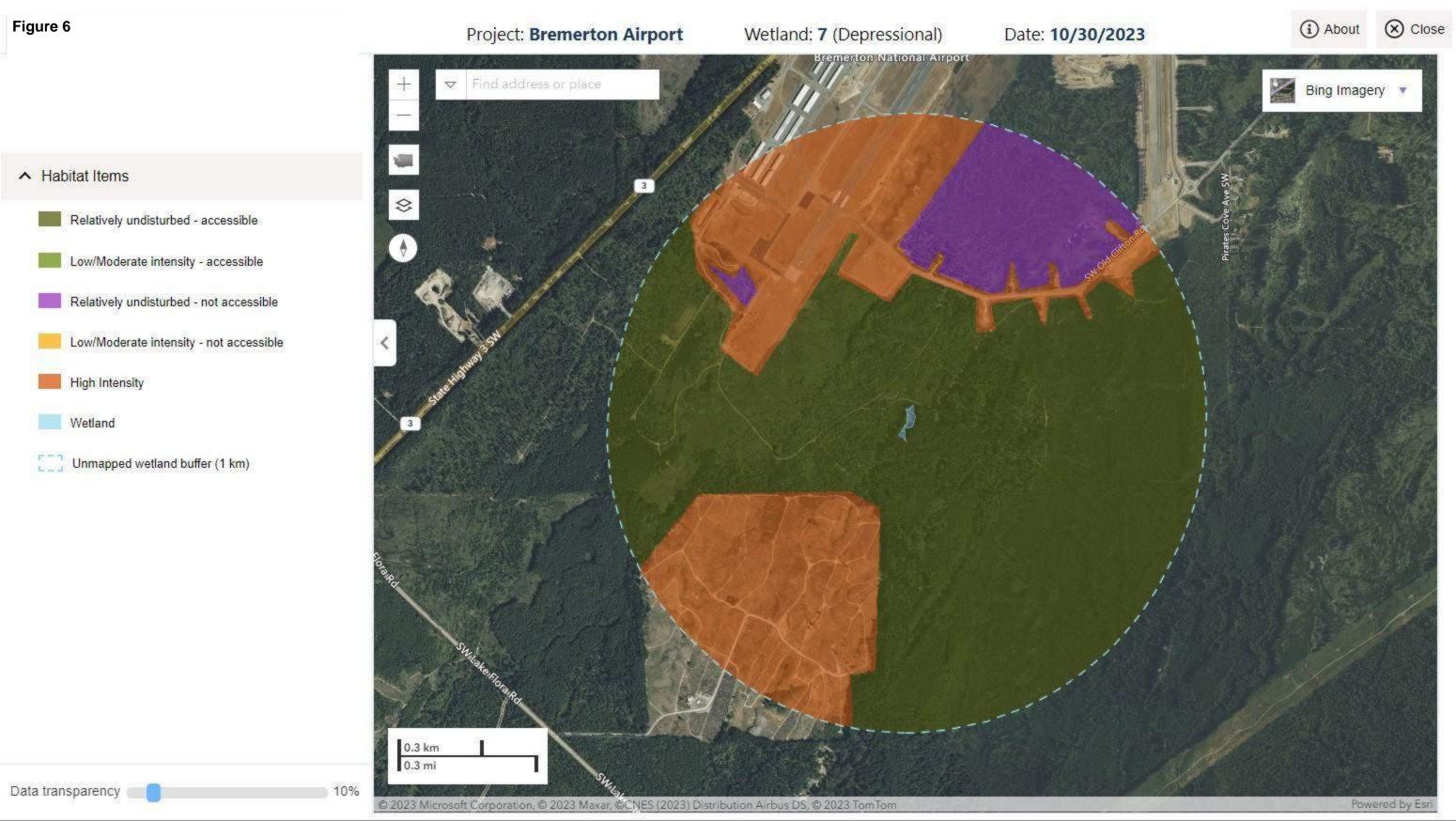


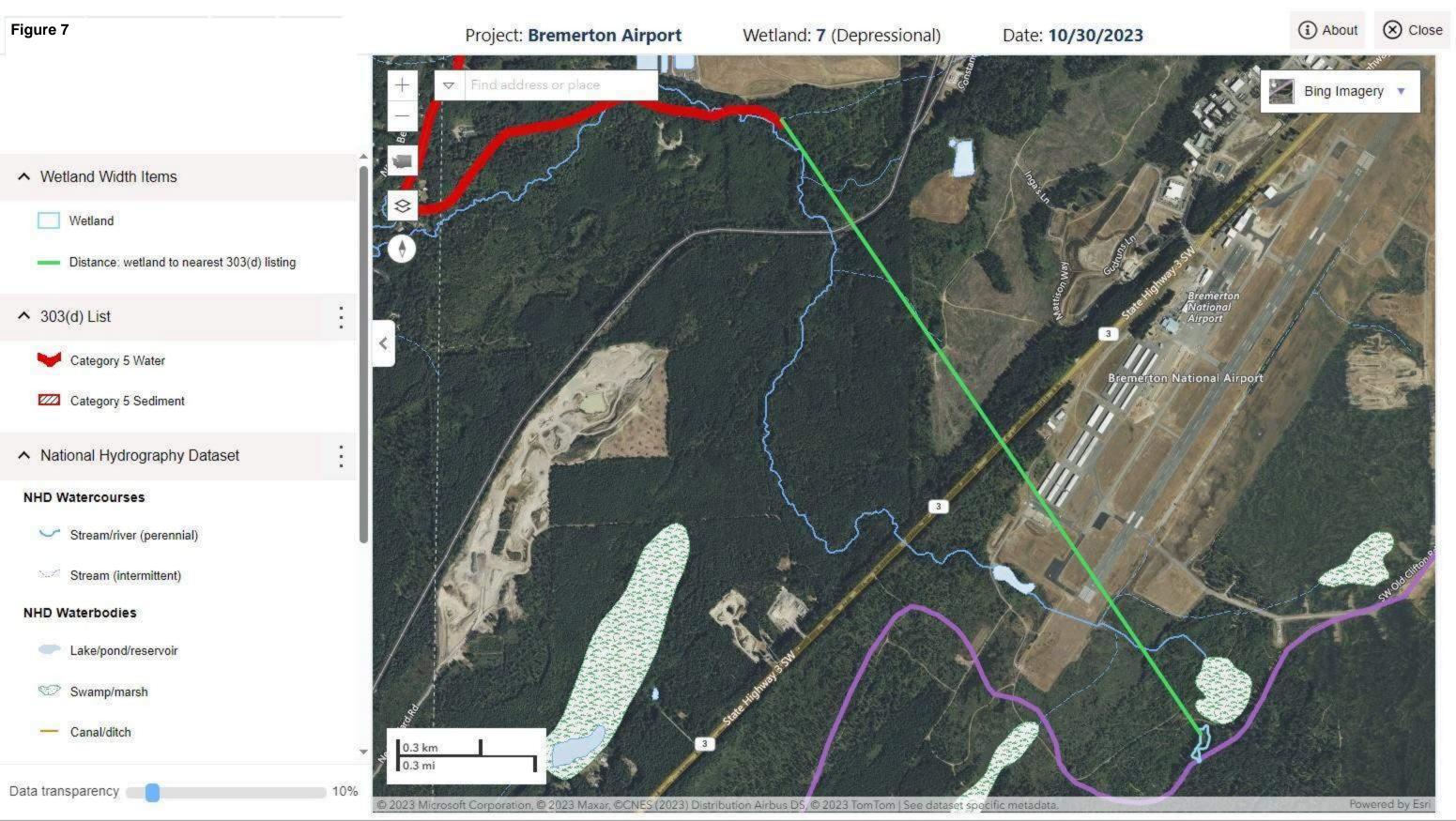


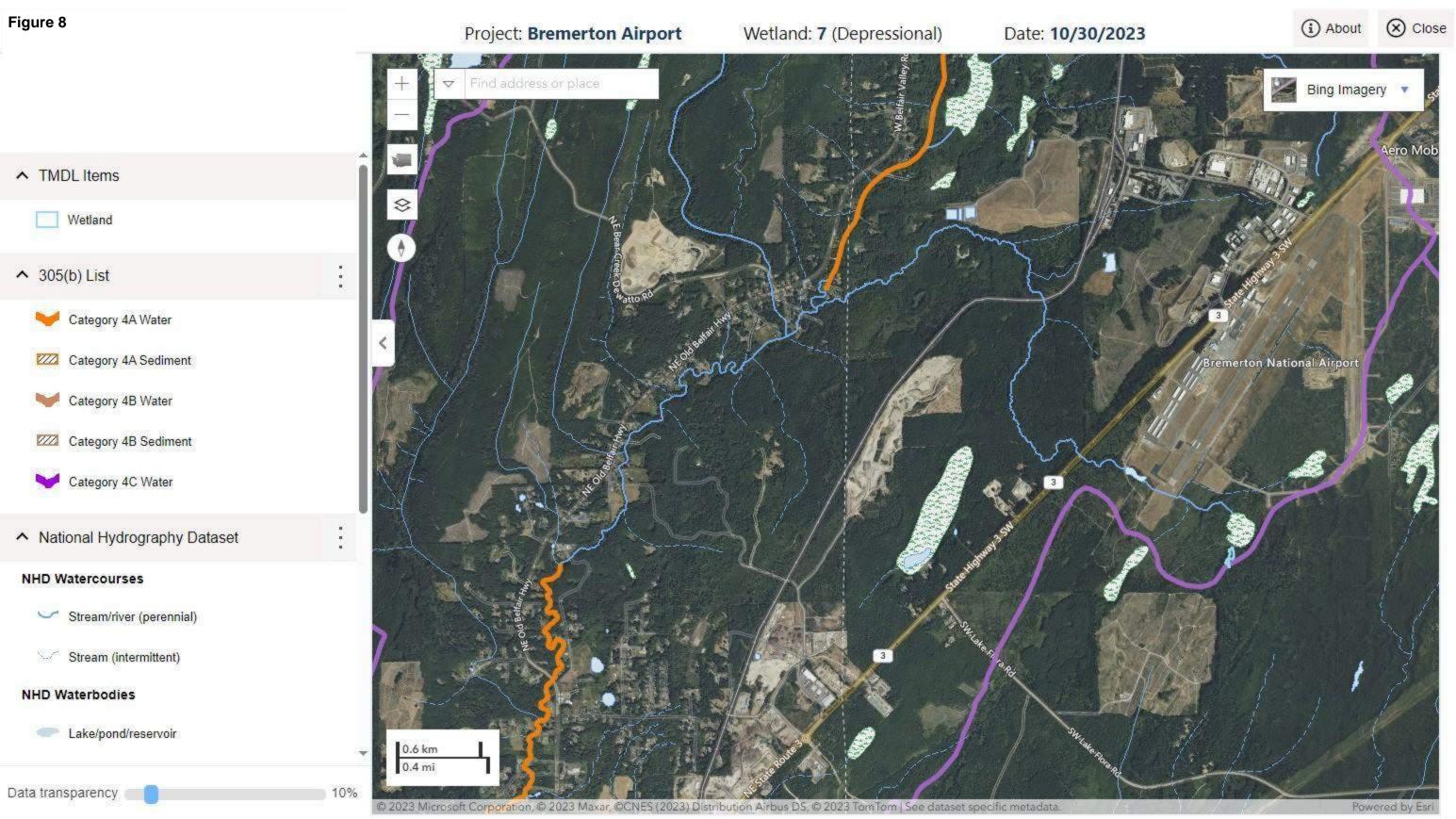












# **RATING SUMMARY - Western Washington**

Name of wetland (or ID#): 8 Date of site visit: 10/25/2023

Rated By: Matthew Evinger Trained by Ecology? Yes [X] No [] Date of Training:

06/09/2022

**HGM Class used for rating:** Depressional **Wetland has multiple HGM classes? Yes** [] **No** [X]

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

Source of base aerial photo/map:

**OVERALL WETLAND CATEGORY: [Category III]** (based on functions [X] 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	lmproving Water Quality	Hydrologic	Habitat	
Site Potential	н	M	L	
Landscape Potential	L	L	Н	
Value	Н	L	Н	Total
Score Based on Ratings	7	4	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	
Wetland of High Conservation Value	
Bog	
Forested	
Coastal Lagoon	
Interdunal	
None of the above	Not Applicable

# Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

<u>Bepressional vvedarias</u>		
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 (can be added to map of hydroperiods)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	D 2.2, D 5.2	
Map of the contributing basin	D 4.3, D 5.3	
1km Polygon: Area that extends 1km 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	

# **DEPRESSIONAL AND FLATS WETLANDS**

Water Quality Functions - Indicators that the site functions to improve water quality

D 1.0 Does the site have the pot	ential to improve water quality?			
<b>D 1.1</b> What are the characteristics	of surface water outflows from the wetland?			
Wetland has no surface water out	let.	points = 3		
Wetland has an intermittently flow	ving, or highly constricted, outlet.	points = 2		
Wetland has an unconstricted, or spermanently flowing	slightly constricted, surface outlet that is	points = 1		
Wetland is a flat depression whose	e outlet is a permanently flowing ditch.	points = 1	Score:	3
<b>D 1.2</b> Can the soil 2in below the s	urface be identified as true clay or organic soil?			
Mapped as true clay or organic (m	nuck or peat)	points = 4		
Soil texture identified as clay or or	rganic in field	points = 4		
Soil texture identified as clay or or	rganic by laboratory test	points = 4		
None of the above		points = 0	Score:	0
<b>D 1.3</b> What are the characteristics	and distribution of persistent plants?			
Wetland has persistent, ungrazed,	plants > 95% of area	points = 5		
Wetland has persistent, ungrazed,	plants > 50% of area	points = 3		
Wetland has persistent, ungrazed	plants > 10% of area	points = 1		
Wetland has persistent, ungrazed	plants < 10% of area	points = 0	Score:	5
<b>D 1.4</b> What are the characteristics	of seasonal ponding or inundation in the wetland	area?		
Area seasonally ponded is > 50%	total area of wetland	points = 4		
Area seasonally ponded is > 25%	total area of wetland	points = 2		
Area seasonally ponded is < 25%	total area of wetland	points = 0	Score:	4
		Total for D 1:	12	
Rating of Site Potential	[X] <b>12-16</b> = <b>H</b> [ ] <b>6-11</b> = <b>M</b> [ ] <b>0-5</b> = <b>L</b>	Record the rating on t	he first p	pag

D 2.0 Does the landscape have the potential to s	upport the water quality function of the site?		
D 2.1 Does the wetland unit receive stormwater dis	charges?		
Yes	points = 1		
No	points = 0	Score:	0
D 2.2 ls >10% of the area within 150ft of the wetlar	nd in land uses that generate pollutants in surface runoff?		
Yes	points = 1		
No	points = 0	Score:	0
D 2.3 Are there septic systems within 250ft of the w	vetland?		
Yes	points = 1		
No	points = 0	Score:	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	?	
Yes	points = 1		
No	points = 0	Score:	0

D 2.5 What are the other sources of pollutants coming into the wetland?	
Total for D 2:	0

Rating of Landscape Potential	[] 3-4 = H[] 1-2 = M[X] 0 = L	Record the rating o	n the first page
D 3.0 Is the water quality improvement	ent provided by the site valuable to society	?	
D 3.1 Does the wetland discharge dire	ectly (i.e., within 1 mi) to a stream, river, lake, or	marine water that is on	the 303(d)
list?			
Yes		points = 1	
No		points = 0	Score: 0
D 3.2 Is the wetland in a basin or sub-	basin where an aquatic resource is on the 303(	(d) list?	
Yes		points = 1	
No		points = 0	Score: 0
D 3.3 Has the site been identified in a	watershed or local plan as important for main	taining water quality?	
Yes		points = 2	
No		points = $0$	Score: 2

**Rating of Value** 

[X] 2-4 = H[] 1 = M[] 0 = L

Record the rating on the first page

2

Total for D 3:

# **DEPRESSIONAL AND FLATS WETLANDS**

**Hydrologic Functions** - Indicators that the site functions to reduce flooding and stream degradtion

# D 4.0 Does the site have the potential to reduce flooding and erosion?

<b>D 4.1</b> What are the characteristics of surface water outflows from the wetland?		
Wetland has no surface water outlet.	points = 4	
Wetland has an intermittently flowing, or highly constricted, outlet.	points = 2	
Wetland is a flat depression whose outlet is a permanently flowing ditch.	points = 1	
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	Score: 4
D 4.2 What is the depth of storage during the wet periods?		
Marks of ponding are 3ft or more above the surface or bottom of the outlet.	points = 7	
Marks of ponding are between 2ft to <3ft from the surface or bottom of the outlet.	points = 5	
Marks of ponding are at least 0.5ft to <2ft from the surface or the bottom of the outlet.	points = 3	
The wetland is a "headwater" wetland.	points = 3	
The wetland is flat but has small depressions on the surface that trap water.	points = 1	
Marks of ponding are less than 0.5ft (6in).	points = 0	Score: 0

Wetland name or number: 8				
D 4.3 What is the contribution of the	wetland to storage in the watershed?			
The area of the basin is less than 10 to	imes the area of the unit	points = 5		
The area of the basin is 10 to 100 times	nes the area of the unit	points = 3		
The area of the basin is more than 10	00 times the area of the unit	points = 0		
Entire wetland is in the Flats class		points = 5	Score:	3
		Total for D 4:	7	
Rating of Site Potential	[] 12-16 = H [X] 6-11 = M [] 0-5 = L	Record the rating on t	he first p	age
D 5.0 Does the landscape have the	potential to support hydrologic functions of t	he site?		
D 5.1 Does the wetland unit receive	stormwater discharges?			
Yes		points = 1		
No		points = 0	Score:	0
<b>D 5.2</b> <u>Is &gt;10% of the area within 150</u>	ft of the wetland in land uses that generate exce	ss runoff?		
Yes		points = 1		
No		points = 0	Score:	0
D 5.3 Is more than 25% of the contri	buting basin of the wetland covered with intensiv	ve human land uses?		
Yes		points = 1		
No		points = 0	Score:	0
		Total for D 5:	0	
Rating of Landscape Potential	[] 3 = H[] 1-2 = M[X] 0 = L	Record the rating on t	he first p	age
D 6.0 Are the hydrologic functions	provided by the site valuable to society?			
<b>D 6.1</b> <u>Is the wetland in a landscape t</u>	hat has flooding problems?			
Flooding occurs in a sub-basin that is	s immediately down-gradient of the wetland.	points = 2		
Surface flooding problems are in a su	ub-basin farther down-gradient.	points = 1		
Flooding from groundwater is an issu	ue in the basin.	points = 1		
The existing or potential outflow from	n the wetland is so constrained that water	points - 0		
cannot reach areas that flood.		points = 0		
There are no problems with flooding	downstream of the wetland.	points = 0	Score:	0
<b>D 6.2</b> Has the site been identified as	important for flood storage or flood conveyance	in a regional flood contro	ol plan?	
Yes		points = 2		
No		points = 0	Score:	0
		Total for D 6:	0	

**Rating of Value** 

[] **2-4** = **H**[] **1** = **M**[X] **0** = **L** 

Record the rating on the first page

# **HABITAT FUNCTIONS**

**These questions apply to wetlands of all HGM classes** - Indicators that the site functions to provide important habitat

# H 1.0 Does the wetland have the potential to provide habitat for many species?

H 1.1 What is the structure of the plant community?			
Aquatic Bed			
Emergent			
✓ Scrub-shrub			
Forested			
Multiple strata within the Forested class (canopy, sub-canopy, shrubs, herbaceous,			
moss/ground cover)			
4 structures or more	points = 4		
3 structures	points = 2		
2 structures	points = 1		
1 structure	points = 0		
No structures present	points = 0	Score:	0
H 1.2 What are the hydroperiods that meet the size thresholds in the wetland?			
Permanently flooded or inundated			
Seasonally flooded or inundated			
Occasionally flooded or inundated			
Saturated only			
Permanently flowing stream or river in, or adjacent to, the wetland			
Seasonally flowing stream in, or adjacent to, the wetland			
Lake Fringe wetland			
Freshwater Tidal wetland			
4 or more types present	points = 3		
3 types present or Lake Fringe / Freshwater Tidal Fringe	points = 2		
2 types present	points = 1		
1 type present	points = 0		
None present	points = 0	Score:	1
H 1.3 What is the richness of the plant species in the wetland?			
>19 species	points = 2		
5-19 species	points = 1		
<5 species	points = 0	Score:	0

H 1.4 What is the interspersion of habitats?		
High	points = 3	
Moderate	points = 2	
Low	points = 1	
None	points = 0	Score: 0
H 1.5 What are the special habitat features in the wetland?		
Large, downed, woody debris within the wetland (>4in diameter and 6ft long).		
Standing snags (dbh >4in) within the wetland		
Undercut banks are present for at least 6.6ft (2m) and/or overhanging plants		
extend at least 3.3ft (1m) over open water or a stream (or ditch) in, or contiguous with		
the wetland, for at least 33ft (10m)		
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 (cut shrubs		
or trees that have not yet weathered where wood is exposed)		
At least 0.25ac of thin-stemmed persistent plants or woody branches are present		
in areas that are permanently or seasonally inundated (structures for egg-laying by		
amphibians)		
✓ Invasive plants cover less than 25% of the wetland area in every stratum of plants		
(see H 1.1 for list of strata)		
6 habitats selected	points = 6	
5 habitats selected	points = 5	
4 habitats selected	points = 4	
3 habitats selected	points = 3	
2 habitats selected	points = 2	
1 habitat selected	points = 1	
No habitats selected	points = 0	Score: 1
	Total for H 1:	2

**Rating of Site Potential** 

[] 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 habitat functions of the site?

H 2.1 What is the percentage of accessible habitat within 1km of the wetland?		
>33% of 1km Polygon	points = 3	
20-33% of 1km Polygon	points = 2	
10-19% of 1km Polygon	points = 1	
<10% of 1km Polygon	points = 0	Score: 3
H 2.2 What is the percentage of total habitat in a 1km polygon around the wetland?		
Total habitat is >50% of the Polygon	points = 3	
Total habitat is 10-50% of the Polygon and in 1-3 patches	points = 2	
Total habitat is 10-50% of the Polygon and in >3 patches	points = 1	
Total habitat is <10% of the Polygon	points = 0	Score: 3

Wa	tlan	d n	ama	or	num	hor:	Q
VVE	TIAN	a n	ame	Or	num	Der.	$\sim$

Total for H 2:	6	
<50% of the Polygon is high intensity land use points = 0	Score:	0
50% of the Polygon is high intensity land use points = -2		
H 2.3 What is the land use intensity in the 1km polygon?		

**Rating of Landscape Potential** 

[X] **4-6** = **H** [ ] **1-3** = **M** [ ] **0** = **L** 

Record the rating on the first page

# H 3.0 Is the habitat provided by the site valuable to society?

		Total for H 3:	2	
Th	e site does not meet any of the criteria for societal value	points = 0	Score:	2
	e site has 1 or 2 WDFW priority habitats within 100m	points = 1		
	societal value	•		
	e wetland has 3 or more WDFW priority habitats within 100m, or meets the criteria	points = 2		
	The wetland has been categorized as an important habitat site in a local plan			
	The wetland is a Wetland of High Conservation Value			
L	The wetland is mapped as a location for an individual WDFW priority species			
Ŀ	The wetland provides habitat for Threatened or Endangered species			
Ine	e following criteria automatically score 2 points:			
<u></u>	Talus			
<b>✓</b>	Snags and Logs			
	Cliffs			
	Caves			
	Nearshore (Coastal, Open Coast, Puget Sound)			
<b>√</b>	Instream			
	Fresh Deepwater			
	Westside Prarie			
<b>✓</b>	Riparian			
	Oregon White Oak			
Ļ	Old-growth/Mature Forests			
	Herbaceous Balds			
	Biodiversity Areas and Corridors			
	Aspen Stands			
Н:	3.1 Does the site provide habitat for species valued in laws, regulations, or policies?			

**Rating of Value** 

[X] **2** = **H** [ ] **1** = **M** [ ] **0** = **L** 

Record the rating on the first page

# **CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS**

## **SC 1.0 Estuarine Wetlands**

SC 1.1 Does the wetland meet all of the following criteria for Estuarine wetlands?  The dominant water regime is tidal  The wetland is vegetated  The water salinity is greater than 0.5 ppt	
Yes - Go to SC 1.2	
No - Not an Estuarine Wetland	Result: Not an Estuarine Wetland
SC 1.2 <u>Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, National Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-1513</u>	
Yes - Category I Estuarine Wetland No - Go to SC 1.3	Result:
SC 1.3 Is the wetland unit at least 1ac in size and meets at least two of the following three condition.  The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 10% cover of non-native plant species.  At least 75% of the landward edge of the wetland has a 100ft buffer of shrub, forest, or ungrazed or un-mowed grassland  The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.	ons?
Yes - Category I Estuarine Wetland No - Category II Estuarine Wetland	Result:
SC 2.0 Wetlands of High Conservation Value	
SC 2.1 Does the wetland overlap with any known or historical rare plant or rare & high-quality eco WNHP Data Explorer?	osystem polygons on the
Yes - Category I Wetland of High Conservation Value No - Go to SC 2.2	Result: Go to SC 2.2
SC 2.2 Does the wetland have a rare plant species, rare plant community, or high-quality common may qualify the site as a WHCV?	plant community that
Yes - Category I Wetland of High Conservation Value	
No - Not a Wetland of High Conservation Value	Result: Not a Wetland of High Conservation Value

SC 3.0 Bogs	
SC 3.1 Does an area within the wetland unit have organic soil horizons, either peats or mucks, the	at compose 16in or more
of the first 32in of the soil profile?	
Yes - Go to SC 3.3	
No - Go to SC 3.2	Result: Go to SC 3.2
SC 3.2 Does an area within the wetland unit have organic soils, either peats or mucks, that are le	ss than 16 in deep over
bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a	a lake or pond?
Yes - Go to SC 3.3	
No - Not a Bog Wetland	Result: Not a Bog
Two Two a bog we hand	Wetland
SC 3.3 Does an area with peats or mucks have more than 70% cover of mosses at ground level, A	AND at least 30% cover of
plant species listed in the table provided in the instructions?	
Yes - Category I Bog Wetland	
res - Category i Bog Wetland	
No - Go to SC 3.4	Result:
No - Go to SC 3.4  SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, wes hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of sites.	tern red cedar, western the species (or
No - Go to SC 3.4  SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, wes hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of combinations of species) listed in the table found in the instructions provide more than 30% of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine AND any of the subalpine fir, western white pine fir, western white pine fir, western white pine fir, we subalpine	tern red cedar, western the species (or
No - Go to SC 3.4  SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, wes hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of sites.	tern red cedar, western the species (or
No - Go to SC 3.4  SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, wes hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of combinations of species) listed in the table found in the instructions provide more than 30% of to canopy?	tern red cedar, western the species (or
No - Go to SC 3.4  SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, wes hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of combinations of species) listed in the table found in the instructions provide more than 30% of to canopy?  Yes - Category I Bog Wetland	tern red cedar, western the species (or he cover under the
No - Go to SC 3.4  SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, wes hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of combinations of species) listed in the table found in the instructions provide more than 30% of to canopy?	tern red cedar, western the species (or
No - Go to SC 3.4  SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, wes hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of combinations of species) listed in the table found in the instructions provide more than 30% of to canopy?  Yes - Category I Bog Wetland	tern red cedar, western the species (or he cover under the
No - Go to SC 3.4  SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, wes hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of combinations of species) listed in the table found in the instructions provide more than 30% of to canopy?  Yes - Category I Bog Wetland No - Not a Bog Wetland	tern red cedar, western the species (or he cover under the  Result:
No - Go to SC 3.4  SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, wes hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of combinations of species) listed in the table found in the instructions provide more than 30% of to canopy?  Yes - Category I Bog Wetland No - Not a Bog Wetland  SC 4.0 Forested Wetlands	tern red cedar, western the species (or he cover under the  Result:
No - Go to SC 3.4  SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, wes hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of combinations of species) listed in the table found in the instructions provide more than 30% of total canopy?  Yes - Category I Bog Wetland No - Not a Bog Wetland  SC 4.0 Forested Wetlands  SC 4.1 Does the wetland have at least 1 contiguous acre of forest that meets one of the following	tern red cedar, western the species (or he cover under the  Result:
No - Go to SC 3.4  SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, wes hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of combinations of species) listed in the table found in the instructions provide more than 30% of to canopy?  Yes - Category I Bog Wetland No - Not a Bog Wetland  SC 4.0 Forested Wetlands  SC 4.1 Does the wetland have at least 1 contiguous acre of forest that meets one of the followin Old-growth forests	tern red cedar, western the species (or he cover under the  Result:
No - Go to SC 3.4  SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, wes hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of combinations of species) listed in the table found in the instructions provide more than 30% of to canopy?  Yes - Category I Bog Wetland No - Not a Bog Wetland  SC 4.0 Forested Wetlands  SC 4.1 Does the wetland have at least 1 contiguous acre of forest that meets one of the followin Old-growth forests	tern red cedar, western the species (or he cover under the  Result:

Wetland

Wetland name or number: 8

No - Not a Forested Wetland

# **SC 5.0 Wetlands in Coastal Lagoons**

<b>SC 5.1</b> Coastal Lagoons: Does the wetland meet all of the following criteria of a wetland in a coast 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 rocks	•
The depression in which the wetland is located contains ponded water that is saline or brackisl	n
(>0.5 ppt) during most of the year in at least a portion of the open water area (measured near the	
bottom)	
Vac. Co to SC F 2	
Yes - Go to SC 5.2	
No - Not a Coastal Lagoon Wetland	Result: Not a Coastal
The first a coastal Lagosii from and	Lagoon Wetland
SC 5.2 Does the wetland meet all of the following three conditions?	
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).	
At least 75% of the landward edge of the wetland has a 100ft buffer of shrub, forest, or un-	
grazed or un-mowed grassland.	
the wetland is larger than 0.10ac (4350 sqft)	
Yes - Category I Coastal Lagoon	
No - Category II Coastal Lagoon	Result:
SC 6.0 Interdunal Wetlands	
SC 6.1 Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownersh	ip WBUO)?
Yes - Go to SC 6.2	
	Result: Not an
No - Not an Interdunal Wetland	
	Interdunal Wetland
SC 6.2 Is the wetland 1ac or larger in size, or a mosaic that is 1ac or larger in size?	
Wetland is larger than 1ac in size - Go to SC 6.3	
Wetland is a mosaic larger than 1ac is size - Category II Interdunal Wetland	
No - Go to SC 6.4	Result:
	11004111
SC 6.3 Does the wetland score 8 or 9 points for the habitat functions?	
Yes - Category I Interdunal Wetland	
No - Category II Interdunal Wetland	Result:
SC 6.4 Is the wetland unit between 0.1ac and 1ac, or in a mosaic of wetlands that is between 0.1ac	r and 1ac in size?
55 5.7 15 the wettand diffe between 5.1de and 1de, of the amosale of wettands that is between 5.1de	C GITG TGC III 312C;
Vac. Cataway III Intervel weel Watland	
Yes - Category III Interdunal Wetland	
No - Category IV Interdunal Wetland	Result:

# **Category of wetland based on Special Characteristics**

If you answered No for all types, enter "Not Applicable" on Summary Form

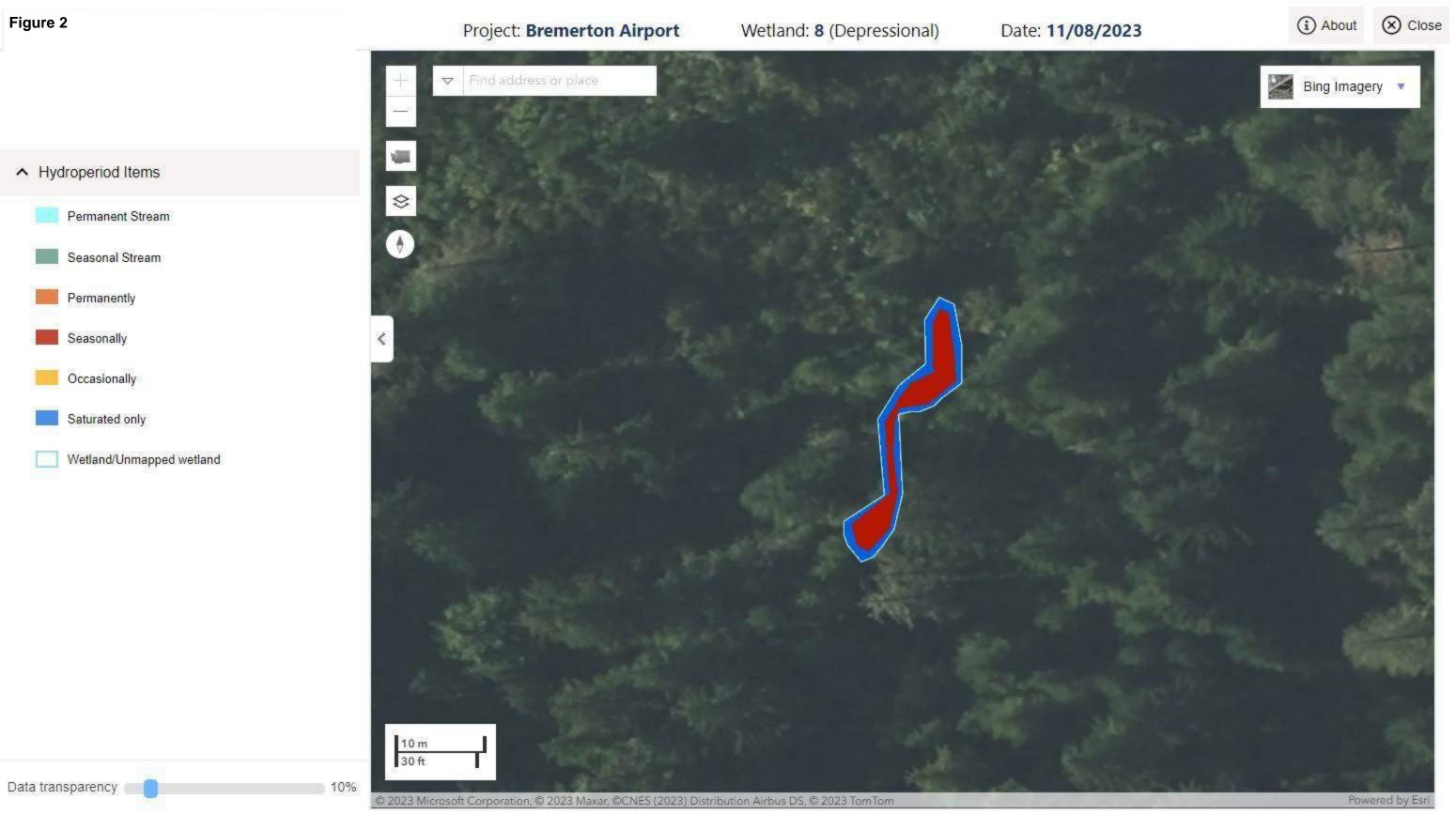
Final Category: Not Applicable

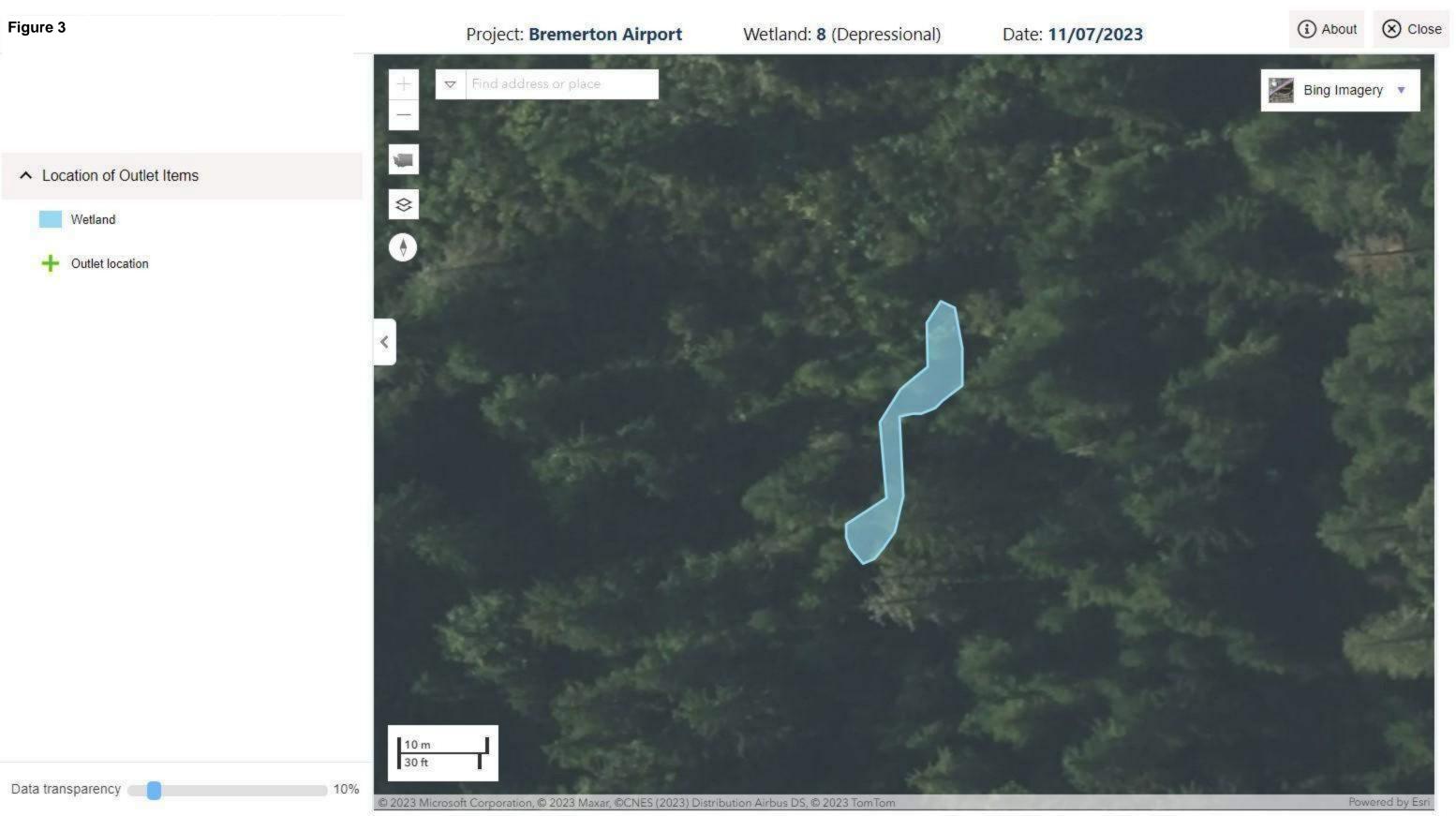
Data transparency 10

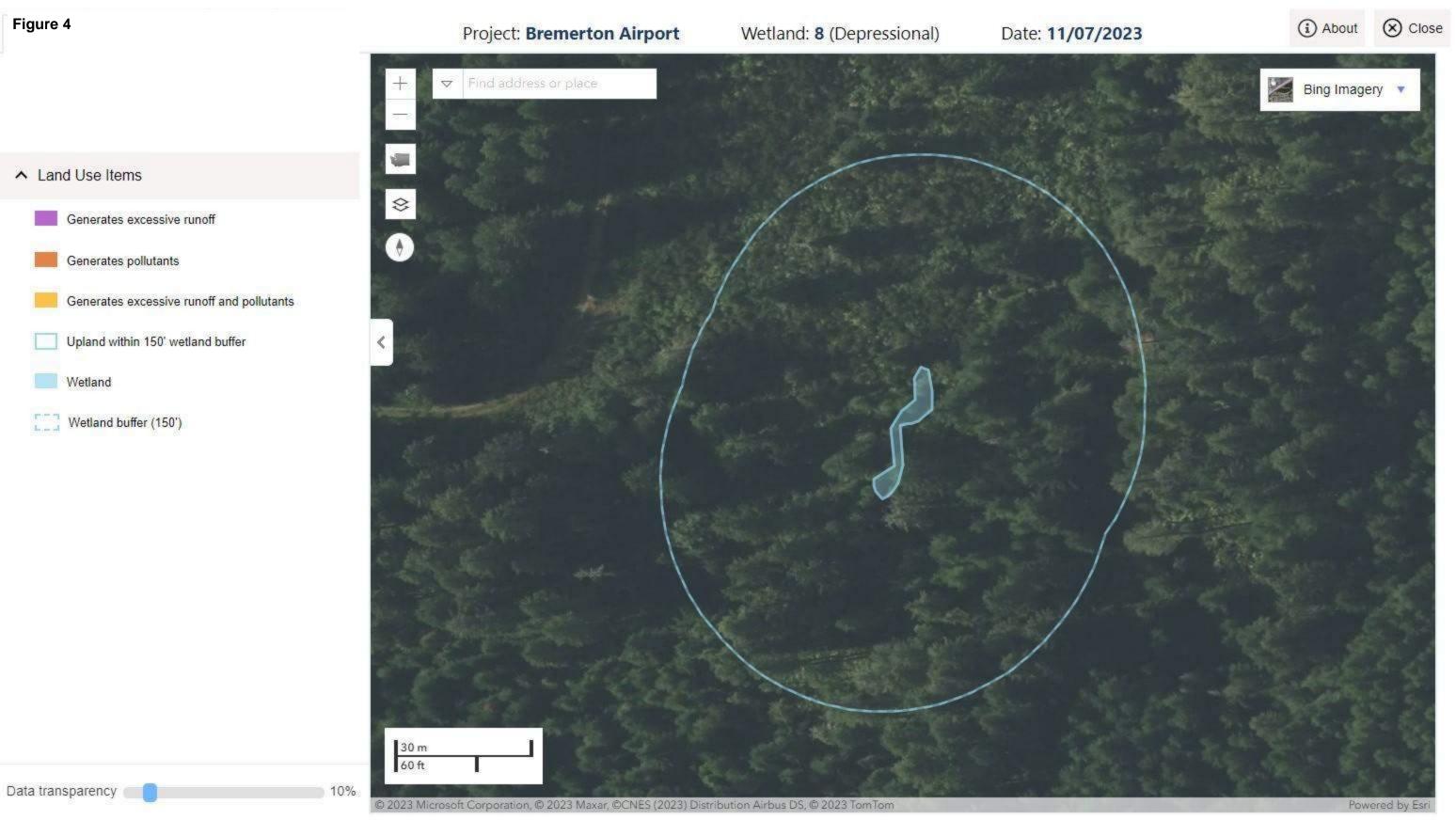
© 2023 Microsoft Corporation, © 2023 Maxar, ©CNES (2023) Distribution Airbus DS, © 2023 TomTom

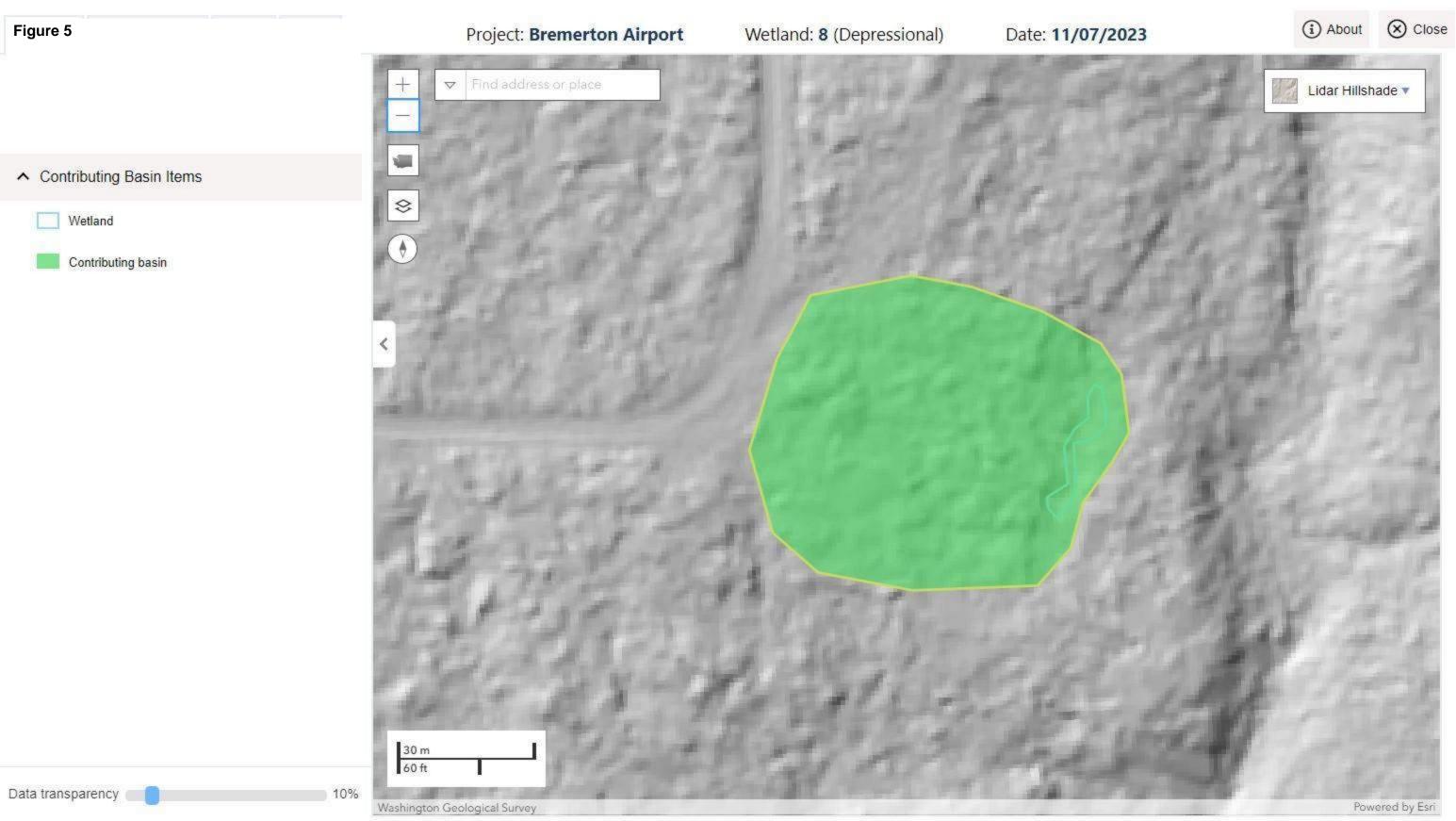
10 m 30 ft

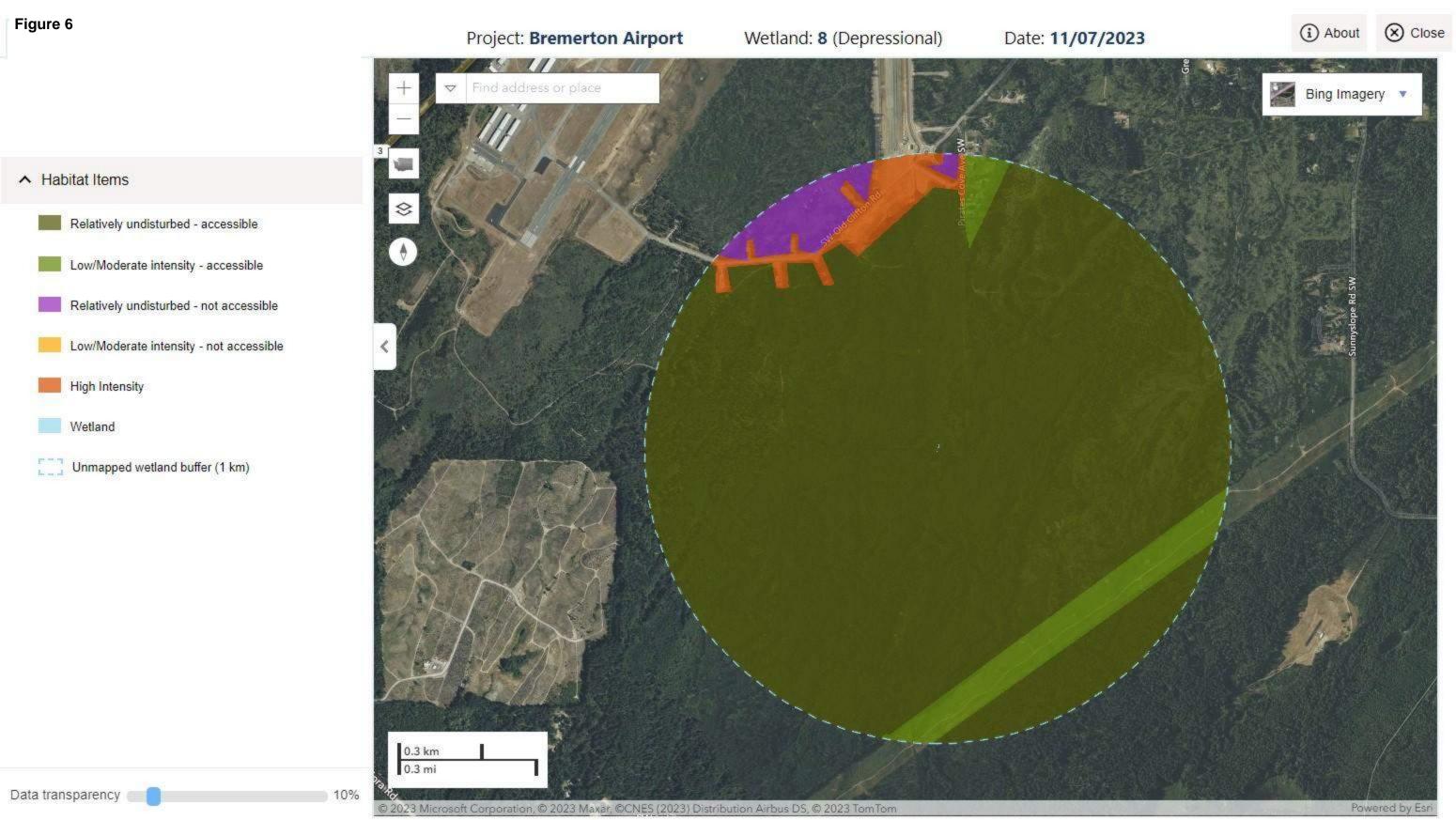
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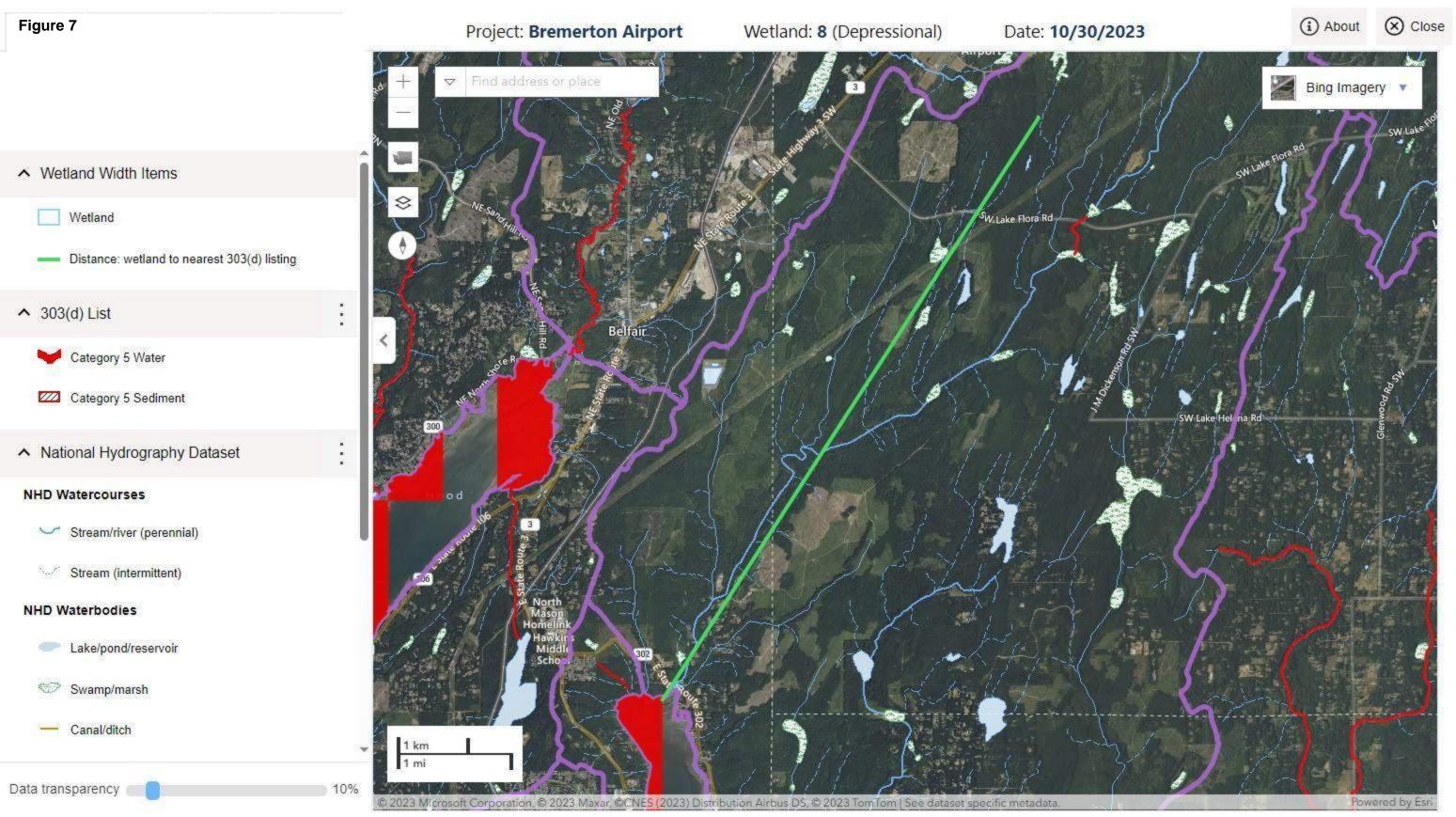


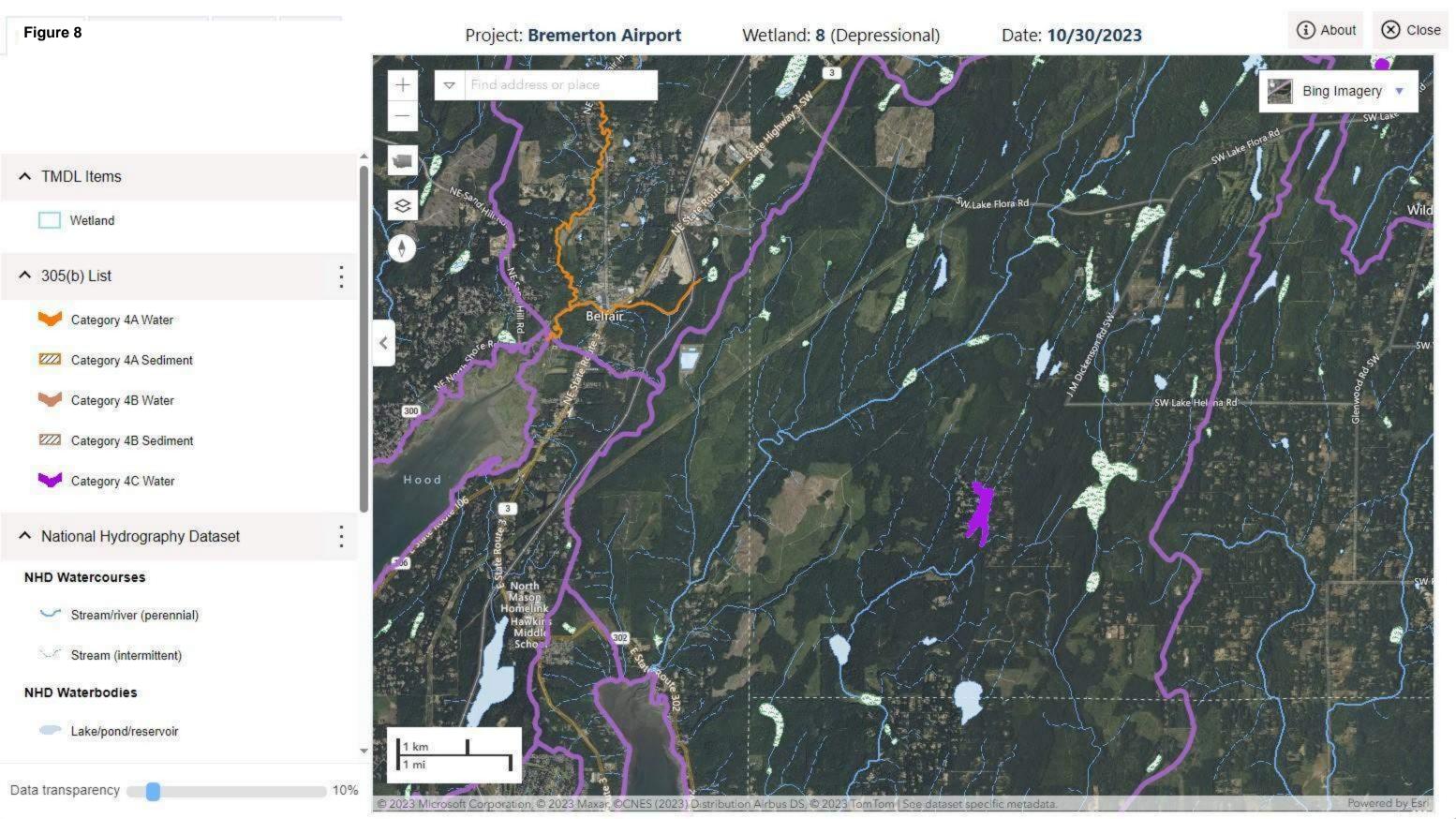












# **RATING SUMMARY - Western Washington**

Name of wetland (or ID#): 9 Date of site visit: 10/25/2023

Rated By: Matthew Evinger Trained by Ecology? Yes [X] No [] Date of Training:

06/09/2022

**HGM Class used for rating:** Depressional **Wetland has multiple HGM classes? Yes** [] **No** [X]

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

**OVERALL WETLAND CATEGORY: [Category III]** (based on functions [X] 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

Score Based on Ratings	7	5	7	19
Value	н	L	M	Total
Landscape Potential	M	М	Н	
Site Potential	M	М	М	
FUNCTION	Improving Water Quality	Hydrologic	Habitat	

# Score for each function based on three ratings (order of ratings is not important) 9 = H,H,H8 = H,H,M7 = H,H,L7 = H,M,M6 = H,M,L6 = M,M,M5 = H,L,L5 = M,M,L4 = M,L,L

3 = L,L,L

### 2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	
Wetland of High Conservation Value	
Bog	
Forested	
Coastal Lagoon	
Interdunal	
None of the above	Not Applicable

# Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

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 (can be added to map of hydroperiods)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	D 2.2, D 5.2	
Map of the contributing basin	D 4.3, D 5.3	
1km Polygon: Area that extends 1km 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	

# **DEPRESSIONAL AND FLATS WETLANDS**

Water Quality Functions - Indicators that the site functions to improve water quality

Rating of Site Potential	[ ] 12-16 = H [X] 6-11 = M [ ] 0-5 = L	Record the rating on t	the first p	oa
		Total for D 1:	10	
Area seasonally ponded is < 25% to	otal area of wetland	points = 0	Score:	7
Area seasonally ponded is > 25% to	otal area of wetland	points = 2		
Area seasonally ponded is > 50% to	otal area of wetland	points = 4		
D 1.4 What are the characteristics of	f seasonal ponding or inundation in the wetland a	area?	_	
Wetland has persistent, ungrazed p	lants < 10% of area	points = 0	Score:	
Wetland has persistent, ungrazed p	lants > 10% of area	points = 1		
Wetland has persistent, ungrazed, p	lants > 50% of area	points = 3		
Wetland has persistent, ungrazed, p	lants > 95% of area	points = 5		
D 1.3 What are the characteristics a	nd distribution of persistent plants?			
None of the above		points = 0	Score:	(
Soil texture identified as clay or org	anic by laboratory test	points = 4		
Soil texture identified as clay or org	anic in field	points = 4		
Mapped as true clay or organic (mu	ck or peat)	points = 4		
<b>D 1.2</b> Can the soil 2in below the sui	face be identified as true clay or organic soil?			
Wetland is a flat depression whose	outlet is a permanently flowing ditch.	points = 1	Score:	3
permanently flowing		points = 1		
•	ghtly constricted, surface outlet that is	•		
Wetland has an intermittently flowing	ng, or highly constricted, outlet.	points = 2		
Wetland has no surface water outle		points = 3		
<b>D 1.1</b> What are the characteristics of	of surface water outflows from the wetland?			

D 2.0 Does the landscape have the potential to support the wa	ter quality function of the site?		
D 2.1 Does the wetland unit receive stormwater discharges?			
Yes	points = 1		
No	points = 0	Score:	1
D 2.2 <u>Is &gt;10% of the area within 150ft of the wetland in land uses</u>	that generate pollutants in surface runoff?		
Yes	points = 1		
No	points = 0	Score:	1
D 2.3 Are there septic systems within 250ft of the wetland?			
Yes	points = 1		
No	points = 0	Score:	0
D 2.4 Are there other sources of pollutants coming into the wetlan	d that are not listed in questions D 2.1-D 2.	3?	
Yes	points = 1		
No	points = 0	Score:	0

D 2.5 What are the other sources of pollutants coming into the wetland?	
Total for D 2:	2

Rating of Landscape Potential	[] <b>3-4</b> = <b>H</b> [X] <b>1-2</b> = <b>M</b> [] <b>0</b> = <b>L</b>	Record the rating on the first page
D 3.0 Is the water quality improvement	nt provided by the site valuable to society?	

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	e water that is on th	ne 303(d)	
list?			
Yes	points = 1		
No	points = 0	Score:	0
D 3.2 Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list?			
Yes	points = 1		
No	points = 0	Score:	0
D 3.3 Has the site been identified in a watershed or local plan as important for maintaining	water quality?		
Yes	points = 2		
No	points = 0	Score:	2
		1	

Rating of Value [X] 2-4 = H [] 1 = M [] 0 = L Record the rating on the first page

Total for D 3:

# **DEPRESSIONAL AND FLATS WETLANDS**

**Hydrologic Functions** - Indicators that the site functions to reduce flooding and stream degradtion

# D 4.0 Does the site have the potential to reduce flooding and erosion?

D 4.1 What are the characteristics of surface water outflows from the wetland?		
Wetland has no surface water outlet.	points = 4	
Wetland has an intermittently flowing, or highly constricted, outlet.	points = 2	
Wetland is a flat depression whose outlet is a permanently flowing ditch.	points = 1	
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	Score: 4
D 4.2 What is the depth of storage during the wet periods?		
Marks of ponding are 3ft or more above the surface or bottom of the outlet.	points = 7	
Marks of ponding are between 2ft to <3ft from the surface or bottom of the outlet.	points = 5	
Marks of ponding are at least 0.5ft to <2ft from the surface or the bottom of the outlet.	points = 3	
The wetland is a "headwater" wetland.	points = 3	
The wetland is flat but has small depressions on the surface that trap water.	points = 1	
Marks of ponding are less than 0.5ft (6in).	points = 0	Score: 0

Wetland name or number: 9				
D 4.3 What is the contribution of the	wetland to storage in the watershed?			
The area of the basin is less than 10 t	imes the area of the unit	points = 5		
The area of the basin is 10 to 100 tim	nes the area of the unit	points = 3		
The area of the basin is more than 10	00 times the area of the unit	points = 0		
Entire wetland is in the Flats class		points = 5	Score:	5
		Total for D 4:	9	
Rating of Site Potential	[] 12-16 = H [X] 6-11 = M [] 0-5 = L	Record the rating on t	he first p	age
D 5.0 Does the landscape have the	potential to support hydrologic functions of the	ne site?		
<b>D</b> 5.1 <u>Does the wetland unit receive</u> :	stormwater discharges?			
Yes		points = 1		
No		points = 0	Score:	1
<b>D 5.2</b> <u>Is &gt;10% of the area within 150</u>	ft of the wetland in land uses that generate excess	ss runoff?		
Yes		points = 1		
No		points = 0	Score:	1
D 5.3 Is more than 25% of the contri	buting basin of the wetland covered with intensiv	e human land uses?		
Yes		points = 1		
No		points = 0	Score:	0
		Total for D 5:	2	
Rating of Landscape Potential	[] 3 = H[X] 1-2 = M[] 0 = L	Record the rating on t	the first p	age
D 6.0 Are the hydrologic functions	provided by the site valuable to society?			
<b>D 6.1</b> Is the wetland in a landscape the	hat has flooding problems?			
Flooding occurs in a sub-basin that is	s immediately down-gradient of the wetland.	points = 2		
Surface flooding problems are in a su	ub-basin farther down-gradient.	points = 1		
Flooding from groundwater is an issu	ue in the basin.	points = 1		
The existing or potential outflow fror	n the wetland is so constrained that water	points = 0		
cannot reach areas that flood.		points – o		
There are no problems with flooding	downstream of the wetland.	points = 0	Score:	0
D 6.2 Has the site been identified as	important for flood storage or flood conveyance	<u>in a regional flood contro</u>	<u>l plan?</u>	
Yes		points = 2		
No		points = 0	Score:	0
		Total for D 6:	0	

**Rating of Value** 

[] **2-4** = **H**[] **1** = **M**[X] **0** = **L** 

Record the rating on the first page

# **HABITAT FUNCTIONS**

**These questions apply to wetlands of all HGM classes** - Indicators that the site functions to provide important habitat

# H 1.0 Does the wetland have the potential to provide habitat for many species?

H 1.1 What is the structure of the plant community?			
Aquatic Bed			
Emergent			
✓ Scrub-shrub			
▼ Forested			
Multiple strata within the Forested class (canopy, sub-canopy, shrubs, herbaceous,			
moss/ground cover)			
4 structures or more	points = 4		
3 structures	points = 2		
2 structures	points = 1		
1 structure	points = 0		
No structures present	points = 0	Score:	1
H 1.2 What are the hydroperiods that meet the size thresholds in the wetland?			
Permanently flooded or inundated			
✓ Seasonally flooded or inundated			
Occasionally flooded or inundated			
✓ Saturated only			
Permanently flowing stream or river in, or adjacent to, the wetland			
Seasonally flowing stream in, or adjacent to, the wetland			
Lake Fringe wetland			
Freshwater Tidal wetland			
4 or more types present	points = 3		
3 types present or Lake Fringe / Freshwater Tidal Fringe	points = 2		
2 types present	points = 1		
1 type present	points = 0		
None present	points = 0	Score:	1
H 1.3 What is the richness of the plant species in the wetland?			
>19 species	points = 2		
5-19 species	points = 1		
<5 species	points = 0	Score:	1

H 1.4 What is the interspersion of habitats?			
High	points = 3		
Moderate	points = 2		
Low	points = 1		
None	points = 0	Score:	1
H 1.5 What are the special habitat features in the wetland?			
✓ Large, downed, woody debris within the wetland (>4in diameter and 6ft long).			
✓ Standing snags (dbh >4in) within the wetland			
Undercut banks are present for at least 6.6ft (2m) and/or overhanging plants			
extend at least 3.3ft (1m) over open water or a stream (or ditch) in, or contiguous with			
the wetland, for at least 33ft (10m)			
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 (cut shrubs			
or trees that have not yet weathered where wood is exposed)			
At least 0.25ac of thin-stemmed persistent plants or woody branches are present			
in areas that are permanently or seasonally inundated (structures for egg-laying by			
amphibians)			
✓ Invasive plants cover less than 25% of the wetland area in every stratum of plants			
(see H 1.1 for list of strata)			
6 habitats selected	points = 6		
5 habitats selected	points = 5		
4 habitats selected	points = 4		
3 habitats selected	points = 3		
2 habitats selected	points = 2		
1 habitat selected	points = 1		
No habitats selected	points = 0	Score:	3
	Total for H 1:	7	

**Rating of Site Potential** 

[] **15-18** = **H** [X] **7-14** = **M** [] **0-6** = **L** Record the rating on the first page

# H 2.0 Does the landscape have the potential to support habitat functions of the site?

H 2.1 What is the percentage of accessible habitat within 1km of the wetland?				
>33% of 1km Polygon	points = 3			
20-33% of 1km Polygon	points = 2			
10-19% of 1km Polygon	points = 1			
<10% of 1km Polygon	points = 0	Score: 2		
H 2.2 What is the percentage of total habitat in a 1km polygon around the wetland?				
Total habitat is >50% of the Polygon	points = 3			
Total habitat is 10-50% of the Polygon and in 1-3 patches	points = 2			
Total habitat is 10-50% of the Polygon and in >3 patches	points = 1			
Total habitat is <10% of the Polygon	points = 0	Score: 3		

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H 2.3 What is the land use intensity in the 1km polygon?			
50% of the Polygon is high intensity land use	points = -2		
<50% of the Polygon is high intensity land use	points = 0	Score:	0
	Total for H 2:	5	

**Rating of Landscape Potential** 

[X] **4-6** = **H** [ ] **1-3** = **M** [ ] **0** = **L** 

Record the rating on the first page

# H 3.0 Is the habitat provided by the site valuable to society?

Total for H 3:	1	
The site does not meet any of the criteria for societal value points = 0	core:	1
The site has 1 or 2 WDFW priority habitats within 100m points = 1		
for societal value		
The wetland has 3 or more WDFW priority habitats within 100m, or meets the criteria points = 2		
The wetland has been categorized as an important habitat site in a local plan		
The wetland is a Wetland of High Conservation Value		
The wetland is mapped as a location for an individual WDFW priority species		
The wetland provides habitat for Threatened or Endangered species		
The following criteria automatically score 2 points:		
Talus		
✓ Snags and Logs		
Cliffs		
Caves		
Nearshore (Coastal, Open Coast, Puget Sound)		
Instream		
Fresh Deepwater		
Westside Prarie		
Riparian		
Oregon White Oak		
Old-growth/Mature Forests		
Herbaceous Balds		
Biodiversity Areas and Corridors		
Aspen Stands		
H 3.1 Does the site provide habitat for species valued in laws, regulations, or policies?		

**Rating of Value** 

[] 2 = H [X] 1 = M [] 0 = L

Record the rating on the first page

# **CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS**

# **SC 1.0 Estuarine Wetlands**

SC 1.1 Does the wetland meet all of the following criteria for Estuarine wetlands?	
The dominant water regime is tidal	
The wetland is vegetated	
The water salinity is greater than 0.5 ppt	
Yes - Go to SC 1.2	_
No - Not an Estuarine Wetland	Result: Not an Estuarine Wetland
SC 1.2 Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, N	atural Area Preserve,
State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151	?
Yes - Category I Estuarine Wetland	
No - Go to SC 1.3	Result:
SC 1.3 Is the wetland unit at least 1ac in size and meets at least two of the following three conditions	ons?
The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and	
has less than 10% cover of non-native plant species.	
At least 75% of the landward edge of the wetland has a 100ft buffer of shrub, forest, or un-	
grazed or un-mowed grassland	
The wetland has at least two of the following features: tidal channels, depressions with open	
water, or contiguous freshwater wetlands.	
Yes - Category I Estuarine Wetland	
No - Category II Estuarine Wetland	Result:
SC 2.0 Wetlands of High Conservation Value	
SC 2.1 Does the wetland overlap with any known or historical rare plant or rare & high-quality eco	osystem polygons on the
WNHP Data Explorer?	
Yes - Category I Wetland of High Conservation Value	
No - Go to SC 2.2	Result: Go to SC 2.2
SC 2.2 Does the wetland have a rare plant species, rare plant community, or high-quality common	plant community that
may qualify the site as a WHCV?	
Yes - Category I Wetland of High Conservation Value	
	Result: Not a Wetland
No - Not a Wetland of High Conservation Value	of High Conservation
	Value

SC 3.0 Bogs	
SC 3.1 Does an area within the wetland unit have organic soil horizons, either peats or mucks, th	at compose 16in or more
of the first 32in of the soil profile?	
Yes - Go to SC 3.3	
No - Go to SC 3.2	Result: Go to SC 3.2
SC 3.2 Does an area within the wetland unit have organic soils, either peats or mucks, that are le	ss than 16 in deep over
bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a	a lake or pond?
Yes - Go to SC 3.3	
No - Not a Bog Wetland	Result: Not a Bog
Not a bog Welland	Wetland
SC 3.3 Does an area with peats or mucks have more than 70% cover of mosses at ground level, A	AND at least 30% cover of
plant species listed in the table provided in the instructions?	
Yes - Category I Bog Wetland	
No - Go to SC 3.4	Result:
No - Go to SC 3.4  SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, west	
SC 3.4 <u>Is an area with peats or mucks forested (&gt;30% cover) with Sitka spruce, subalpine fir, west hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of the subalpine fir, we say that the subalpine fir is the subalpine fir </u>	tern red cedar, western the species (or
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, west hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of to combinations of species) listed in the table found in the instructions provide more than 30% of the second species	tern red cedar, western the species (or
SC 3.4 <u>Is an area with peats or mucks forested (&gt;30% cover) with Sitka spruce, subalpine fir, west hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of the subalpine fir, we say that the subalpine fir is the subalpine fir </u>	tern red cedar, western the species (or
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, west hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of to combinations of species) listed in the table found in the instructions provide more than 30% of the canopy?	tern red cedar, western the species (or
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, west hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of to combinations of species) listed in the table found in the instructions provide more than 30% of the canopy?  Yes - Category I Bog Wetland	tern red cedar, western the species (or the cover under the
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, west hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of to combinations of species) listed in the table found in the instructions provide more than 30% of the canopy?	tern red cedar, western the species (or
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, west hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of to combinations of species) listed in the table found in the instructions provide more than 30% of the canopy?  Yes - Category I Bog Wetland	tern red cedar, western the species (or the cover under the
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, west hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of to combinations of species) listed in the table found in the instructions provide more than 30% of the canopy?  Yes - Category I Bog Wetland  No - Not a Bog Wetland	tern red cedar, western the species (or the cover under the Result:
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, west hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of to combinations of species) listed in the table found in the instructions provide more than 30% of the canopy?  Yes - Category I Bog Wetland No - Not a Bog Wetland  SC 4.0 Forested Wetlands	tern red cedar, western the species (or the cover under the Result:
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, west hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of the combinations of species) listed in the table found in the instructions provide more than 30% of the canopy?  Yes - Category I Bog Wetland No - Not a Bog Wetland  SC 4.0 Forested Wetlands  SC 4.1 Does the wetland have at least 1 contiguous acre of forest that meets one of the following	tern red cedar, western the species (or the cover under the Result:
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, west hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of the combinations of species) listed in the table found in the instructions provide more than 30% of the canopy?  Yes - Category I Bog Wetland No - Not a Bog Wetland  SC 4.0 Forested Wetlands  SC 4.1 Does the wetland have at least 1 contiguous acre of forest that meets one of the following Old-growth forests	tern red cedar, western the species (or the cover under the Result:
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, west hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of the combinations of species) listed in the table found in the instructions provide more than 30% of the canopy?  Yes - Category I Bog Wetland No - Not a Bog Wetland  SC 4.0 Forested Wetlands  SC 4.1 Does the wetland have at least 1 contiguous acre of forest that meets one of the following Old-growth forests	tern red cedar, western the species (or the cover under the Result:

Wetland

**Wetland name or number:** 9

No - Not a Forested Wetland

### **SC 5.0 Wetlands in Coastal Lagoons**

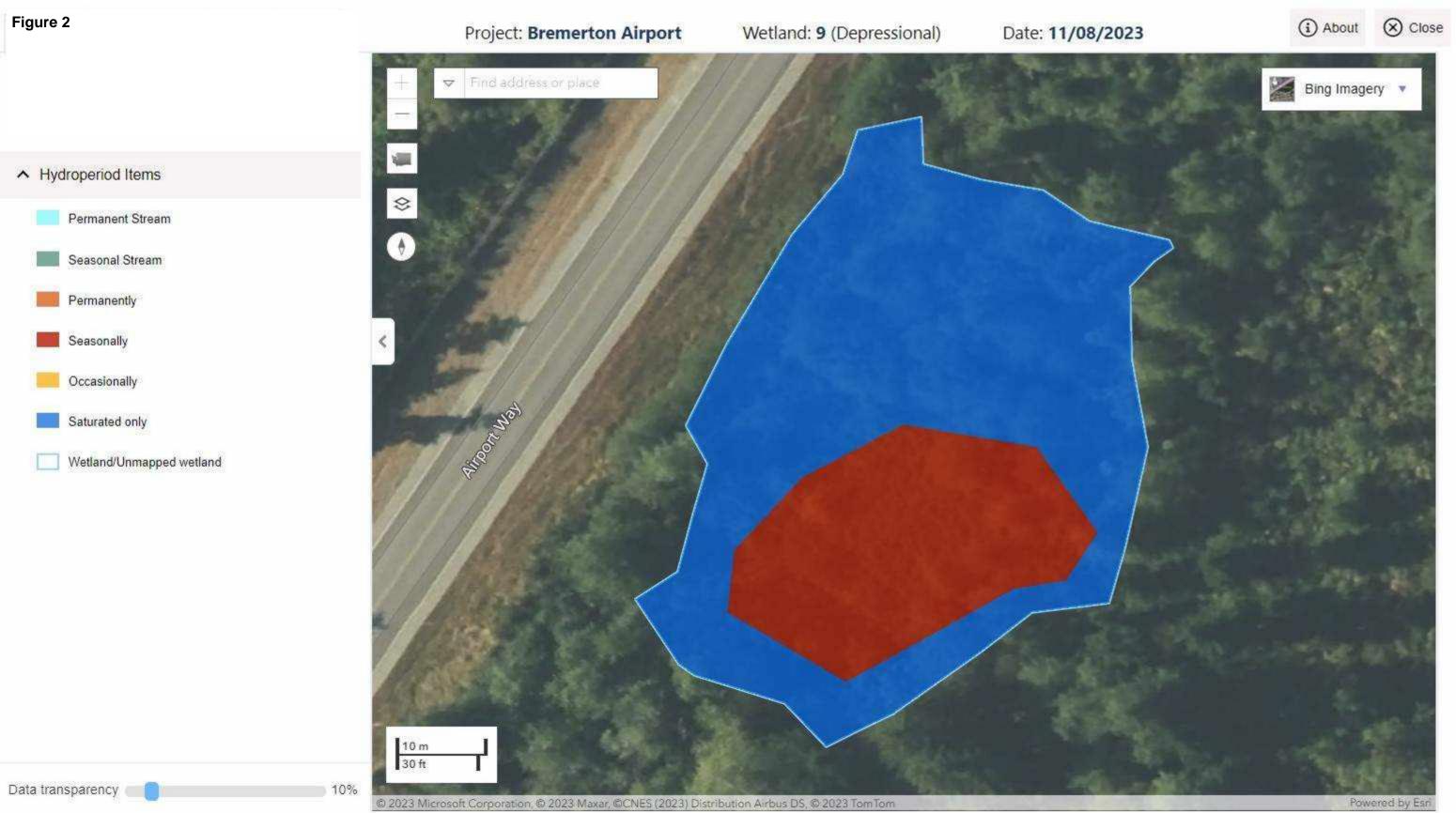
SC 5.1 Coastal Lagoons: Does the wetland meet all of the following criteria of a wetland in a coastal The wetland lies in a depression adjacent to marine waters that is wholly or partially separated	5
from marine waters by sandbanks, gravel banks, shingle, or rocks	
The depression in which the wetland is located contains ponded water that is saline or brackis	h
(>0.5  ppt) during most of the year in at least a portion of the open water area (measured near the	
bottom)	
Yes - Go to SC 5.2	
	Result: Not a Coastal
No - Not a Coastal Lagoon Wetland	Lagoon Wetland
SC 5.2 Does the wetland meet all of the following three conditions?	
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).	
At least 75% of the landward edge of the wetland has a 100ft buffer of shrub, forest, or un-	
grazed or un-mowed grassland.	
the wetland is larger than 0.10ac (4350 sqft)	
Yes - Category I Coastal Lagoon	
No - Category II Coastal Lagoon	Result:
SC 6.0 Interdunal Wetlands	
SC 6.1 Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownersh	ip WBUO)?
Yes - Go to SC 6.2	
No - Not an Interdunal Wetland	Result: Not an
100 - Not all interdunal wetland	<b>Interdunal Wetland</b>
SC 6.2 Is the wetland 1ac or larger in size, or a mosaic that is 1ac or larger in size?	
Wetland is larger than 1ac in size - Go to SC 6.3	
Wetland is a mosaic larger than 1ac is size - Category II Interdunal Wetland	
No - Go to SC 6.4	Result:
SC 6.3 Does the wetland score 8 or 9 points for the habitat functions?	
Yes - Category I Interdunal Wetland	
No - Category II Interdunal Wetland	Result:
SC 6.4 Is the wetland unit between 0.1ac and 1ac, or in a mosaic of wetlands that is between 0.1a	c and 1ac in size?
Yes - Category III Interdunal Wetland	
No - Category IV Interdunal Wetland	Result:

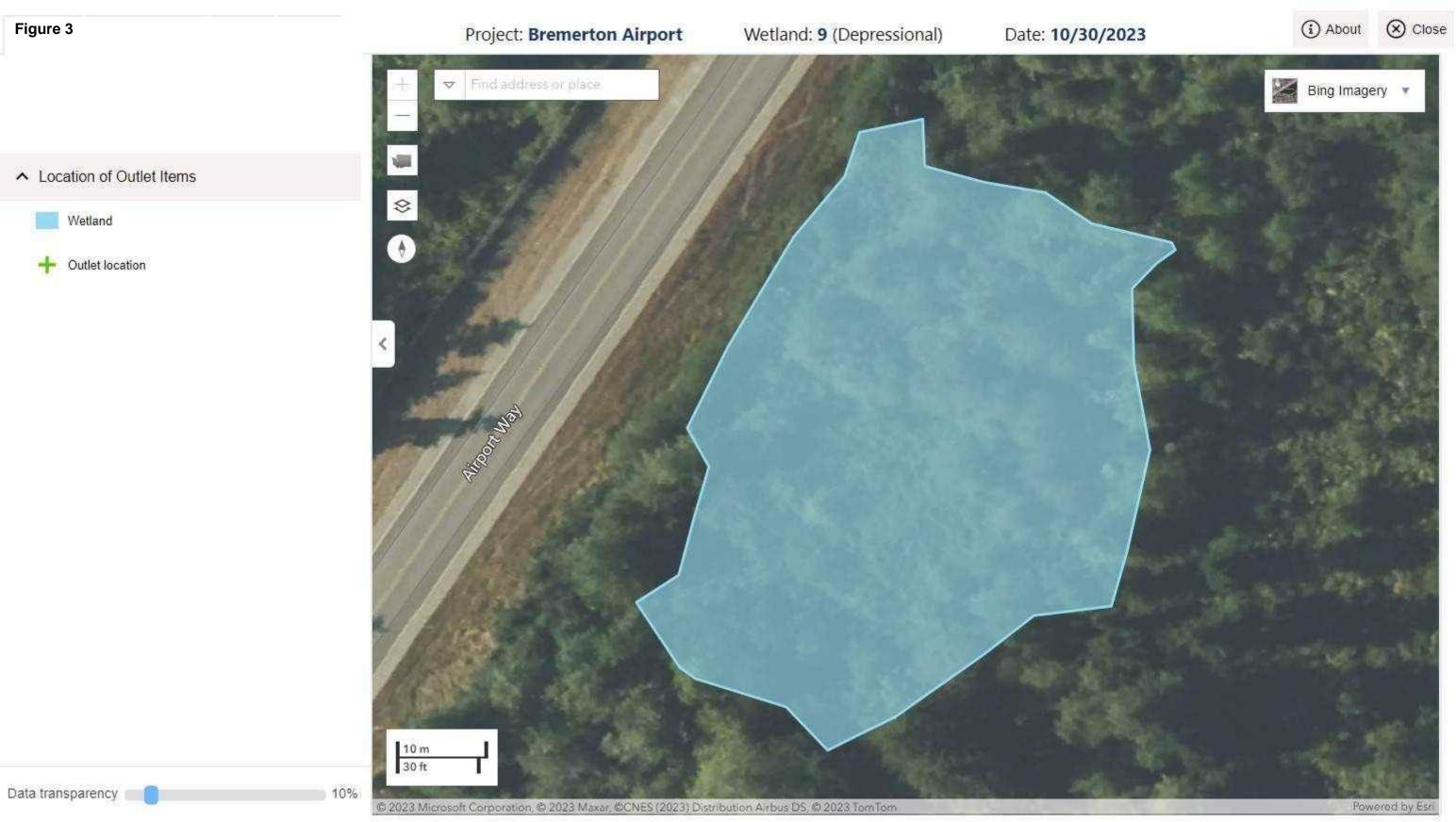
### **Category of wetland based on Special Characteristics**

If you answered No for all types, enter "Not Applicable" on Summary Form

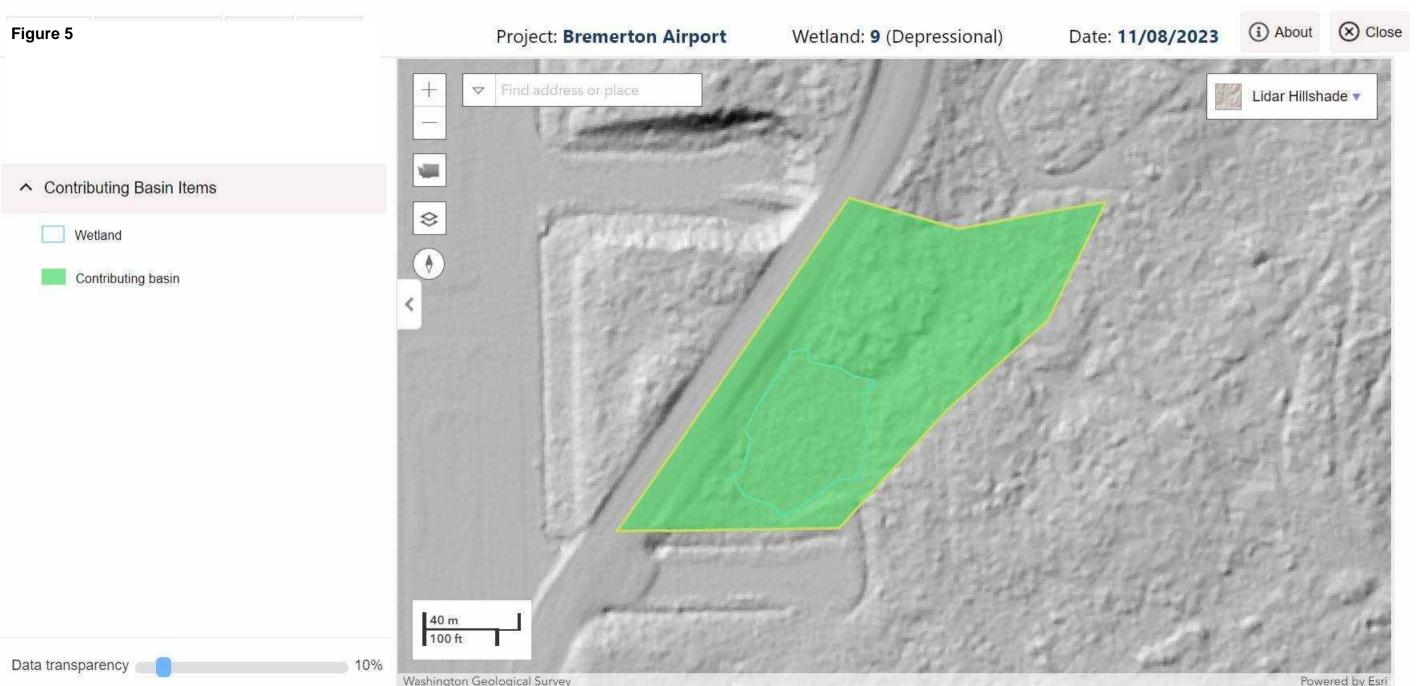
Final Category: Not Applicable

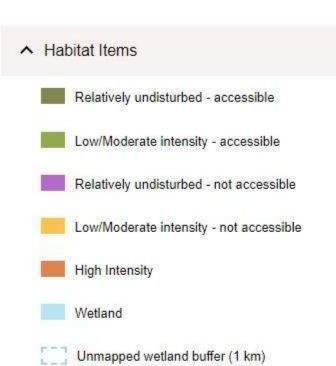




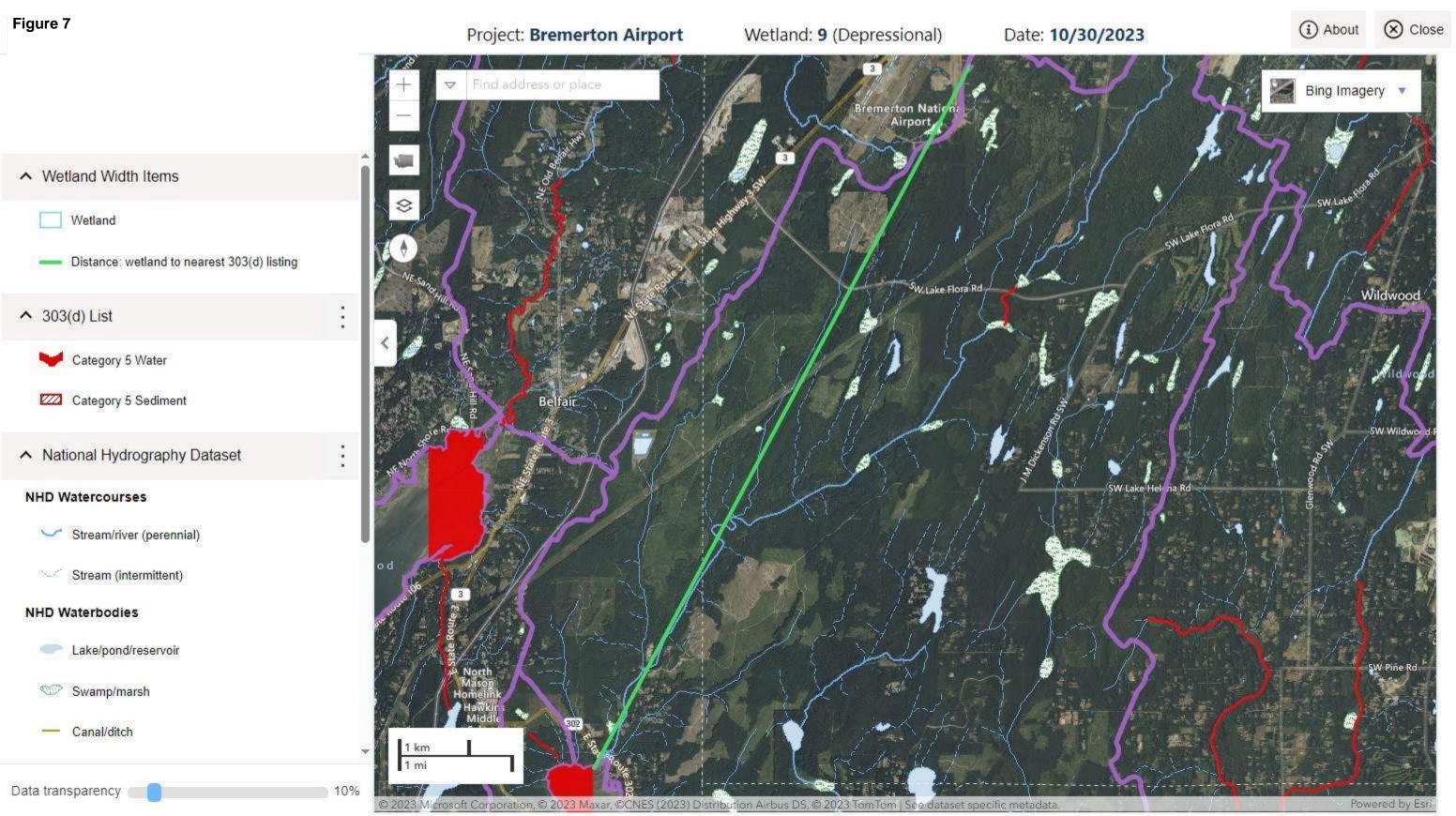


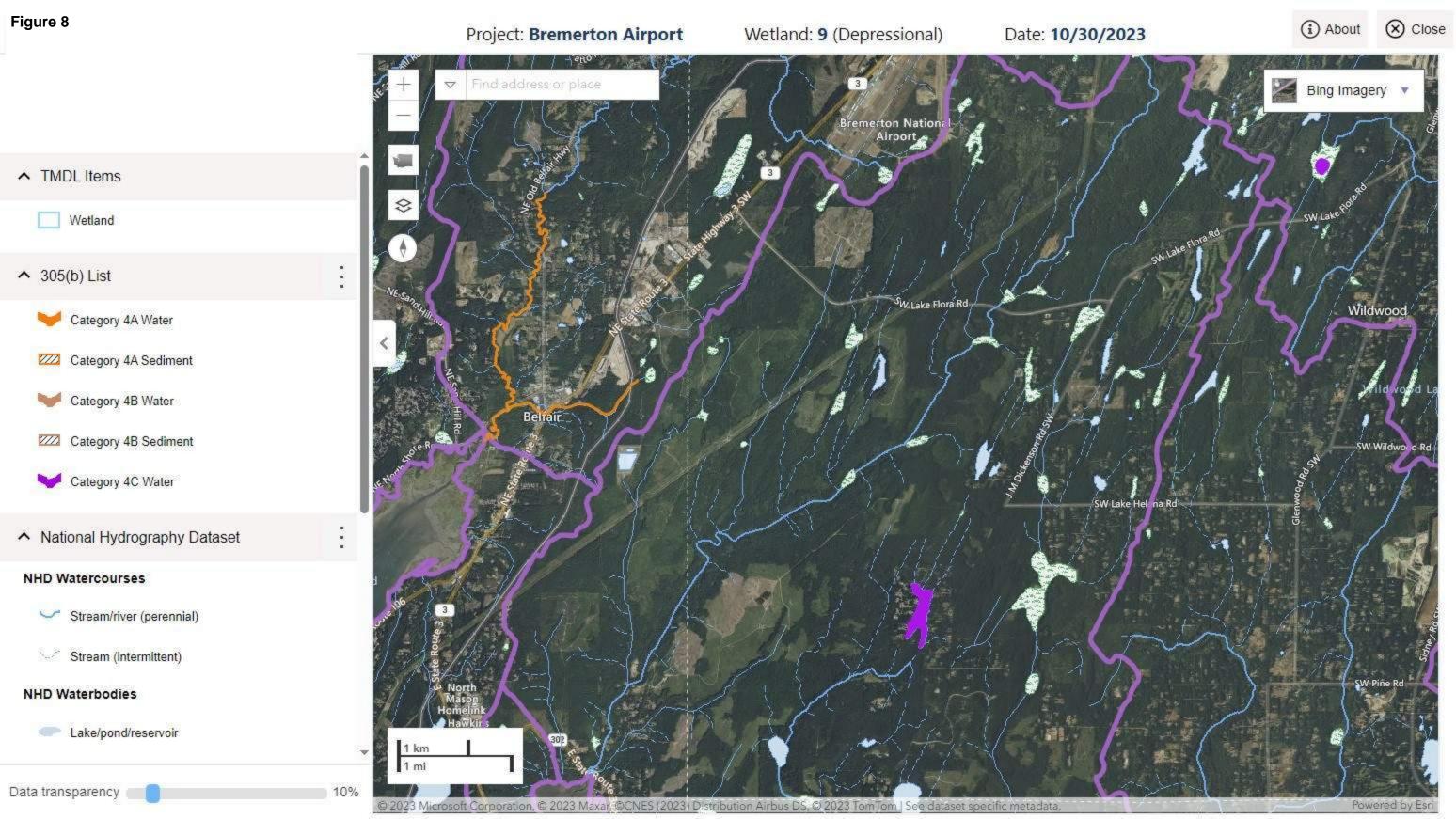












# **RATING SUMMARY - Western Washington**

Name of wetland (or ID#): 10 Date of site visit: 11/06/2023

Rated By: Matthew Evinger Trained by Ecology? Yes [X] No [] Date of Training:

06/09/2022

**HGM Class used for rating:** Depressional **Wetland has multiple HGM classes? Yes** [] **No** [X]

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

**OVERALL WETLAND CATEGORY: [Category III]** (based on functions [X] 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

Score Based on Ratings	7	4	6	17
Value	Н	L	М	Total
Landscape Potential	L	L	Н	
Site Potential	Н	M	L	
FUNCTION	Improving Water Quality	Hydrologic	Habitat	

# Score for each function based on three ratings (order of ratings is not important) 9 = H,H,H8 = H,H,M7 = H,H,L7 = H,M,M6 = H,M,L6 = M,M,M5 = H,L,L5 = M,M,L

4 = M,L,L3 = L,L,L

### 2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	
Wetland of High Conservation Value	
Bog	
Forested	
Coastal Lagoon	
Interdunal	
None of the above	Not Applicable

### Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

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 (can be added to map of hydroperiods)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	D 2.2, D 5.2	
Map of the contributing basin	D 4.3, D 5.3	
1km Polygon: Area that extends 1km 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	

### **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?			
<b>D 1.1</b> What are the characteristics of surface water outflows from the wetland?			
Wetland has no surface water outlet.	points = 3		
Wetland has an intermittently flowing, or highly constricted, outlet.	points = 2		
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 1		
Wetland is a flat depression whose outlet is a permanently flowing ditch.	points = 1	Score:	3
<b>D 1.2</b> Can the soil 2in below the surface be identified as true clay or organic soil?			
Mapped as true clay or organic (muck or peat)	points = 4		
Soil texture identified as clay or organic in field	points = 4		
Soil texture identified as clay or organic by laboratory test	points = 4		
None of the above	points = 0	Score:	C
<b>D 1.3</b> What are the characteristics and distribution of persistent plants?			
Wetland has persistent, ungrazed, plants > 95% of area	points = 5		
Wetland has persistent, ungrazed, plants > 50% of area	points = 3		
Wetland has persistent, ungrazed plants > 10% of area	points = 1		
Wetland has persistent, ungrazed plants < 10% of area	points = 0	Score:	5
<b>D 1.4</b> What are the characteristics of seasonal ponding or inundation in the wetland are	ea?		
Area seasonally ponded is > 50% total area of wetland	points = 4		
Area seasonally ponded is > 25% total area of wetland	points = 2		
Area seasonally ponded is < 25% total area of wetland	points = 0	Score:	4
	Total for D 1:	12	
Rating of Site Potential [X] 12-16 = H [] 6-11 = M [] 0-5 = L	Record the rating on t	he first i	าสเ

D 2.0 Does the landscape have the potential to support the water quality f	unction of the site?		
D 2.1 Does the wetland unit receive stormwater discharges?			
Yes	points = 1		
No	points = 0	Score:	0
D 2.2 Is > 10% of the area within 150ft of the wetland in land uses that generat	e pollutants in surface runoff?		
Yes	points = 1		
No	points = 0	Score:	0
D 2.3 Are there septic systems within 250ft of the wetland?			
Yes	points = 1		
No	points = 0	Score:	0
D 2.4 Are there other sources of pollutants coming into the wetland that are no	ot listed in questions D 2.1-D 2.3	?	
Yes	points = 1		
No	points = 0	Score:	0

D 2.5 What are the other sources of po	ollutants coming into the wetland?			
		Total for D 2:	0	
Rating of Landscape Potential	[] <b>3-4</b> = <b>H</b> [] <b>1-2</b> = <b>M</b> [X] <b>0</b> = <b>L</b>	Record the rating on t	the first p	age
D 3.0 Is the water quality improvement	ent provided by the site valuable to society	?		
<b>D 3.1</b> Does the wetland discharge dire	ctly (i.e., within 1 mi) to a stream, river, lake, or	r marine water that is on th	<u>e 303(d)</u>	
Yes		points = 1		
No		points = 0	Score:	0
D 3.2 Is the wetland in a basin or sub-	basin where an aquatic resource is on the 303	( <u>d) list?</u>		

D 3.3 Has the site been identified in a watershed or local plan as important for maintaining water quality?

Yes points = 2

No points = 0 Score: 2

Total for D 3:

points = 1

points = 0

2

Score: 0

**Rating of Value** 

Yes

No

[X] 2-4 = H[] 1 = M[] 0 = L

Record the rating on the first page

### **DEPRESSIONAL AND FLATS WETLANDS**

**Hydrologic Functions** - Indicators that the site functions to reduce flooding and stream degradtion

### D 4.0 Does the site have the potential to reduce flooding and erosion?

<b>D 4.1</b> What are the characteristics of surface water outflows from the wetland?		
Wetland has no surface water outlet.	points = 4	
Wetland has an intermittently flowing, or highly constricted, outlet.	points = 2	
Wetland is a flat depression whose outlet is a permanently flowing ditch.	points = 1	
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	Score: 4
D 4.2 What is the depth of storage during the wet periods?		
Marks of ponding are 3ft or more above the surface or bottom of the outlet.	points = 7	
Marks of ponding are between 2ft to <3ft from the surface or bottom of the outlet.	points = 5	
Marks of ponding are at least 0.5ft to <2ft from the surface or the bottom of the outlet.	points = 3	
The wetland is a "headwater" wetland.	points = 3	
The wetland is flat but has small depressions on the surface that trap water.	points = 1	
Marks of ponding are less than 0.5ft (6in).	points = 0	Score: 0

Wetland name or number: 10				
<b>D 4.3</b> What is the contribution of the	wetland to storage in the watershed?			
The area of the basin is less than 10 t	imes the area of the unit	points = 5		
The area of the basin is 10 to 100 tim	es the area of the unit	points = 3		
The area of the basin is more than 10	0 times the area of the unit	points = 0		
Entire wetland is in the Flats class		points = 5	Score:	3
		Total for D 4:	7	
Rating of Site Potential	[] 12-16 = H [X] 6-11 = M [] 0-5 = L	Record the rating on t	he first p	age
D 5.0 Does the landscape have the	potential to support hydrologic functions of t	he site?		
<b>D 5.1</b> Does the wetland unit receive s	stormwater discharges?			
Yes		points = 1		
No		points = 0	Score:	0
<b>D 5.2</b> <u>Is &gt;10% of the area within 150</u>	ft of the wetland in land uses that generate exce	ss runoff?		
Yes		points = 1		
No		points = 0	Score:	0
D 5.3 Is more than 25% of the contrib	outing basin of the wetland covered with intensiv	e human land uses?		
Yes		points = 1		
No		points = 0	Score:	0
		Total for D 5:	0	
Rating of Landscape Potential	[] 3 = H[] 1-2 = M[X] 0 = L	Record the rating on t	the first p	age
D 6.0 Are the hydrologic functions	provided by the site valuable to society?			
D 6.1 Is the wetland in a landscape th	nat has flooding problems?			
Flooding occurs in a sub-basin that is	immediately down-gradient of the wetland.	points = 2		
Surface flooding problems are in a su	b-basin farther down-gradient.	points = 1		
Flooding from groundwater is an issu	e in the basin.	points = 1		
The existing or potential outflow from	n the wetland is so constrained that water	points = 0		
cannot reach areas that flood.		ροιιτις – υ		
There are no problems with flooding	downstream of the wetland.	points = 0	Score:	0
<b>D 6.2</b> Has the site been identified as	<u>important for flood storage or flood conveyance</u>	in a regional flood contro	<u>ol plan?</u>	
Yes		points = 2		
No		points = 0	Score:	0
		Total for D 6:	0	

**Rating of Value** 

[] **2-4** = **H**[] **1** = **M**[X] **0** = **L** 

Record the rating on the first page

### **HABITAT FUNCTIONS**

**These questions apply to wetlands of all HGM classes** - Indicators that the site functions to provide important habitat

### H 1.0 Does the wetland have the potential to provide habitat for many species?

H 1.1 What is the structure of the plant community?			
Aquatic Bed			
<b>✓</b> Emergent			
✓ Scrub-shrub			
Forested			
Multiple strata within the Forested class (canopy, sub-canopy, shrubs, herbaceous,			
moss/ground cover)			
4 structures or more	points = 4		
3 structures	points = 2		
2 structures	points = 1		
1 structure	points = 0		
No structures present	points = 0	Score:	1
H 1.2 What are the hydroperiods that meet the size thresholds in the wetland?			
Permanently flooded or inundated			
✓ Seasonally flooded or inundated			
Occasionally flooded or inundated			
✓ Saturated only			
Permanently flowing stream or river in, or adjacent to, the wetland			
Seasonally flowing stream in, or adjacent to, the wetland			
Lake Fringe wetland			
Freshwater Tidal wetland			
4 or more types present	points = 3		
3 types present or Lake Fringe / Freshwater Tidal Fringe	points = 2		
2 types present	points = 1		
1 type present	points = 0		
None present	points = 0	Score:	1
H 1.3 What is the richness of the plant species in the wetland?			
>19 species	points = 2		
5-19 species	points = 1		
<5 species	points = 0	Score:	1

H 1.4 What is the interspersion of habitats?		
High	points = 3	
Moderate	points = 2	
Low	points = 1	
None	points = 0	Score: 1
H 1.5 What are the special habitat features in the wetland?		
✓ Large, downed, woody debris within the wetland (>4in diameter and 6ft long).		
Standing snags (dbh >4in) within the wetland		
Undercut banks are present for at least 6.6ft (2m) and/or overhanging plants		
extend at least 3.3ft (1m) over open water or a stream (or ditch) in, or contiguous with		
the wetland, for at least 33ft (10m)		
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 (cut shrubs		
or trees that have not yet weathered where wood is exposed)		
At least 0.25ac of thin-stemmed persistent plants or woody branches are present		
in areas that are permanently or seasonally inundated (structures for egg-laying by		
amphibians)		
Invasive plants cover less than 25% of the wetland area in every stratum of plants		
(see H 1.1 for list of strata)		
6 habitats selected	points = 6	
5 habitats selected	points = 5	
4 habitats selected	points = 4	
3 habitats selected	points = 3	
2 habitats selected	points = 2	
1 habitat selected	points = 1	
No habitats selected	points = 0	Score: 1
	Total for H 1:	5

**Rating of Site Potential** 

[] **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 habitat functions of the site?

H 2.1 What is the percentage of accessible habitat within 1km of the wetland?		
>33% of 1km Polygon	points = 3	
20-33% of 1km Polygon	points = 2	
10-19% of 1km Polygon	points = 1	
<10% of 1km Polygon	points = 0	Score: 2
H 2.2 What is the percentage of total habitat in a 1km polygon around the wetland?		
Total habitat is >50% of the Polygon	points = 3	
Total habitat is 10-50% of the Polygon and in 1-3 patches	points = 2	
Total habitat is 10-50% of the Polygon and in >3 patches	points = 1	
Total habitat is <10% of the Polygon	points = 0	Score: 3

M	Vetland	namo	or	num	hor.	10
v	venano	name		mum	Der:	111

50% of the Polygon is high intensity land use <50% of the Polygon is high intensity land use	points = -2 points = 0	Score:	0
< 30 % Of the Polygon is high intensity fand use	Total for H 2:	5	<u> </u>

**Rating of Landscape Potential** 

[X] **4-6** = **H** [ ] **1-3** = **M** [ ] **0** = **L** 

Record the rating on the first page

### H 3.0 Is the habitat provided by the site valuable to society?

Н	3.1 Does the site provide habitat for species valued in laws, regulations, or policies?			
	Aspen Stands			
	Biodiversity Areas and Corridors			
	Herbaceous Balds			
	Old-growth/Mature Forests			
	Oregon White Oak			
	Riparian			
	Westside Prarie			
	Fresh Deepwater			
	Instream			
	Nearshore (Coastal, Open Coast, Puget Sound)			
	Caves			
	Cliffs			
<b>✓</b>	Snags and Logs			
	Talus			
Th	e following criteria automatically score 2 points:			
	The wetland provides habitat for Threatened or Endangered species			
	The wetland is mapped as a location for an individual WDFW priority species			
	The wetland is a Wetland of High Conservation Value			
	The wetland has been categorized as an important habitat site in a local plan			
	e wetland has 3 or more WDFW priority habitats within 100m, or meets the criteria	points = 2		
Th	e site has 1 or 2 WDFW priority habitats within 100m	points = 1		
Th	e site does not meet any of the criteria for societal value	points = 0	Score:	1
		Total for H 3:	1	

**Rating of Value** 

[] 2 = H [X] 1 = M [] 0 = L

Record the rating on the first page

### **CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS**

### **SC 1.0 Estuarine Wetlands**

SC 1.1 Does the wetland meet all of the following criteria for Estuarine wetlands?  The dominant water regime is tidal  The wetland is vegetated  The water salinity is greater than 0.5 ppt	
Yes - Go to SC 1.2	
No - Not an Estuarine Wetland	Result: Not an Estuarine Wetland
SC 1.2 <u>Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, National Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-1513</u>	
Yes - Category I Estuarine Wetland No - Go to SC 1.3	Result:
SC 1.3 Is the wetland unit at least 1ac in size and meets at least two of the following three condition.  The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 10% cover of non-native plant species.  At least 75% of the landward edge of the wetland has a 100ft buffer of shrub, forest, or ungrazed or un-mowed grassland  The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.	ons?
Yes - Category I Estuarine Wetland No - Category II Estuarine Wetland	Result:
SC 2.0 Wetlands of High Conservation Value	
SC 2.1 Does the wetland overlap with any known or historical rare plant or rare & high-quality eco WNHP Data Explorer?	osystem polygons on the
Yes - Category I Wetland of High Conservation Value No - Go to SC 2.2	Result: Go to SC 2.2
SC 2.2 Does the wetland have a rare plant species, rare plant community, or high-quality common may qualify the site as a WHCV?	plant community that
Yes - Category I Wetland of High Conservation Value	
No - Not a Wetland of High Conservation Value	Result: Not a Wetland of High Conservation Value

SC 3.0 Bogs	
SC 3.1 Does an area within the wetland unit have organic soil horizons, either peats or mucks, that	at compose 16in or more
of the first 32in of the soil profile?	
Yes - Go to SC 3.3	
No - Go to SC 3.2	Result: Go to SC 3.2
SC 3.2 Does an area within the wetland unit have organic soils, either peats or mucks, that are les	·
bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a	lake or pond?
Van Ca to 50 2 2	
Yes - Go to SC 3.3	Docults Not a Pos
No - Not a Bog Wetland	Result: Not a Bog Wetland
SC 3.3 Does an area with peats or mucks have more than 70% cover of mosses at ground level, A	
plant species listed in the table provided in the instructions?	at least 50% cover of
prant species instea in the tubic provided in the instructions.	
Yes - Category I Bog Wetland	
No - Go to SC 3.4	Result:
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, west	ern red cedar, western
hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of t	<u>he species (or</u>
combinations of species) listed in the table found in the instructions provide more than 30% of the	ne cover under the
<u>canopy?</u>	
Yes - Category I Bog Wetland	Dogula
No - Not a Bog Wetland	Result:
SC 4.0 Forested Wetlands	
SC 4.1 Does the wetland have at least 1 contiguous acre of forest that meets one of the following	<u>g criteria?</u>
Old-growth forests	
Mature forests	
Yes - Category I Forested Wetland	
No - Not a Forested Wetland	Result: Not a Forested
	Wetland

### **SC 5.0 Wetlands in Coastal Lagoons**

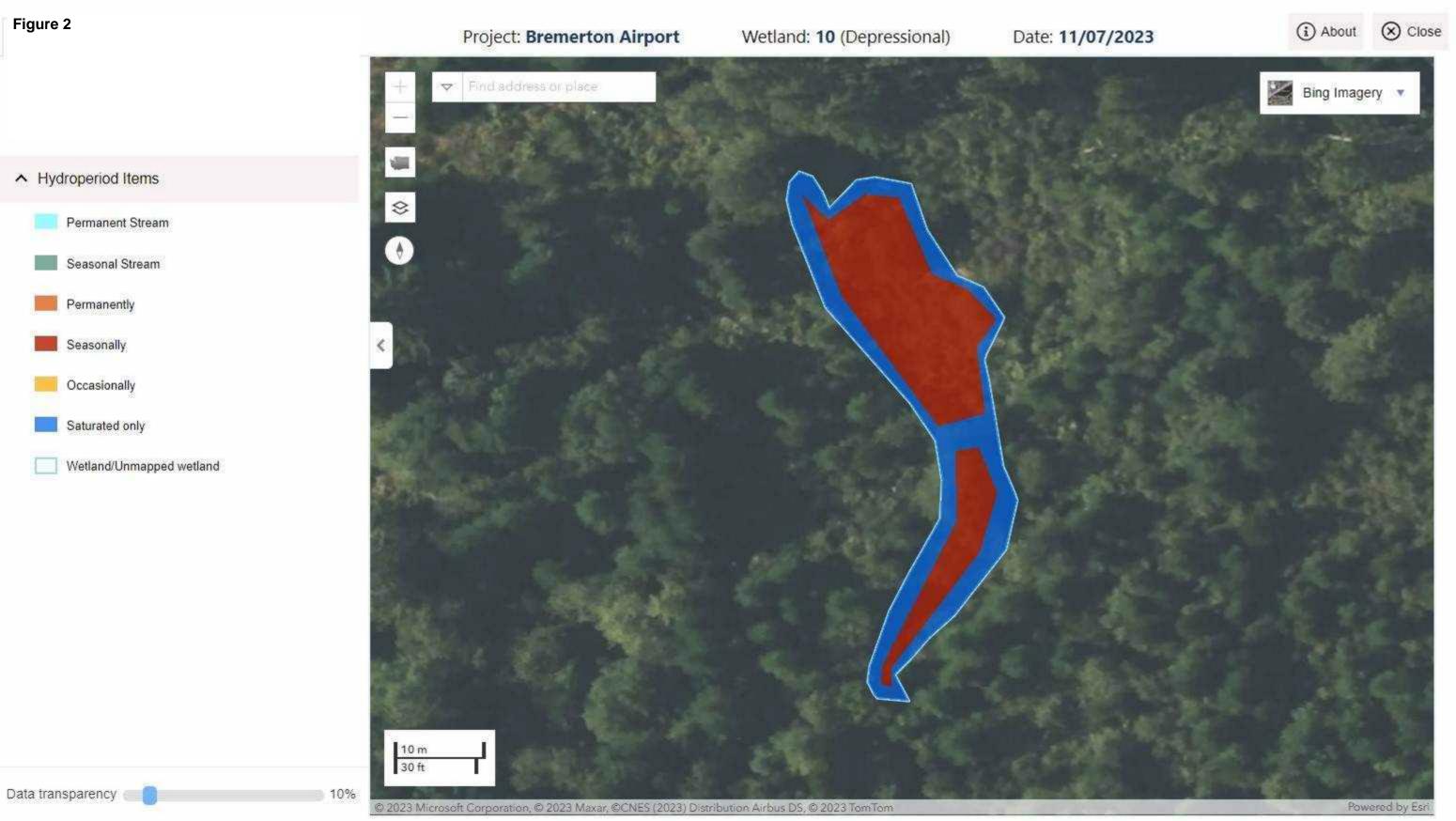
SC 5.1 Coastal Lagoons: Does the wetland meet all of the following criteria of a wetland in a coast	tal lagoon?
The wetland lies in a depression adjacent to marine waters that is wholly or partially separated	•
from marine waters by sandbanks, gravel banks, shingle, or rocks	
The depression in which the wetland is located contains ponded water that is saline or brackish	n
(>0.5 ppt) during most of the year in at least a portion of the open water area (measured near the	
bottom)	
Yes - Go to SC 5.2	
No - Not a Coastal Lagoon Wetland	Result: Not a Coastal
100 - Not a Coastal Lagooff Wetland	Lagoon Wetland
SC 5.2 Does the wetland meet all of the following three conditions?	
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).	
At least 75% of the landward edge of the wetland has a 100ft buffer of shrub, forest, or un-	
grazed or un-mowed grassland.	
the wetland is larger than 0.10ac (4350 sqft)	
Yes - Category I Coastal Lagoon	
No - Category II Coastal Lagoon	Result:
SC 6.0 Interdunal Wetlands	
SC 6.1 Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownersh	ip WBUO)?
Yes - Go to SC 6.2	
No - Not an Interdunal Wetland	Result: Not an
NO - NOt an Interdunal Wetland	Interdunal Wetland
SC 6.2 Is the wetland 1ac or larger in size, or a mosaic that is 1ac or larger in size?	
Wetland is larger than 1ac in size - Go to SC 6.3	
Wetland is a mosaic larger than 1ac is size - Category II Interdunal Wetland	
No - Go to SC 6.4	Result:
SC 6.3 Does the wetland score 8 or 9 points for the habitat functions?	
•	
Yes - Category I Interdunal Wetland	
No - Category II Interdunal Wetland	Result:
SC 6.4 Is the wetland unit between 0.1ac and 1ac, or in a mosaic of wetlands that is between 0.1ac	c and 1ac in size?
Yes - Category III Interdunal Wetland	
No - Category IV Interdunal Wetland	Result:

**Category of wetland based on Special Characteristics** 

If you answered No for all types, enter "Not Applicable" on Summary Form

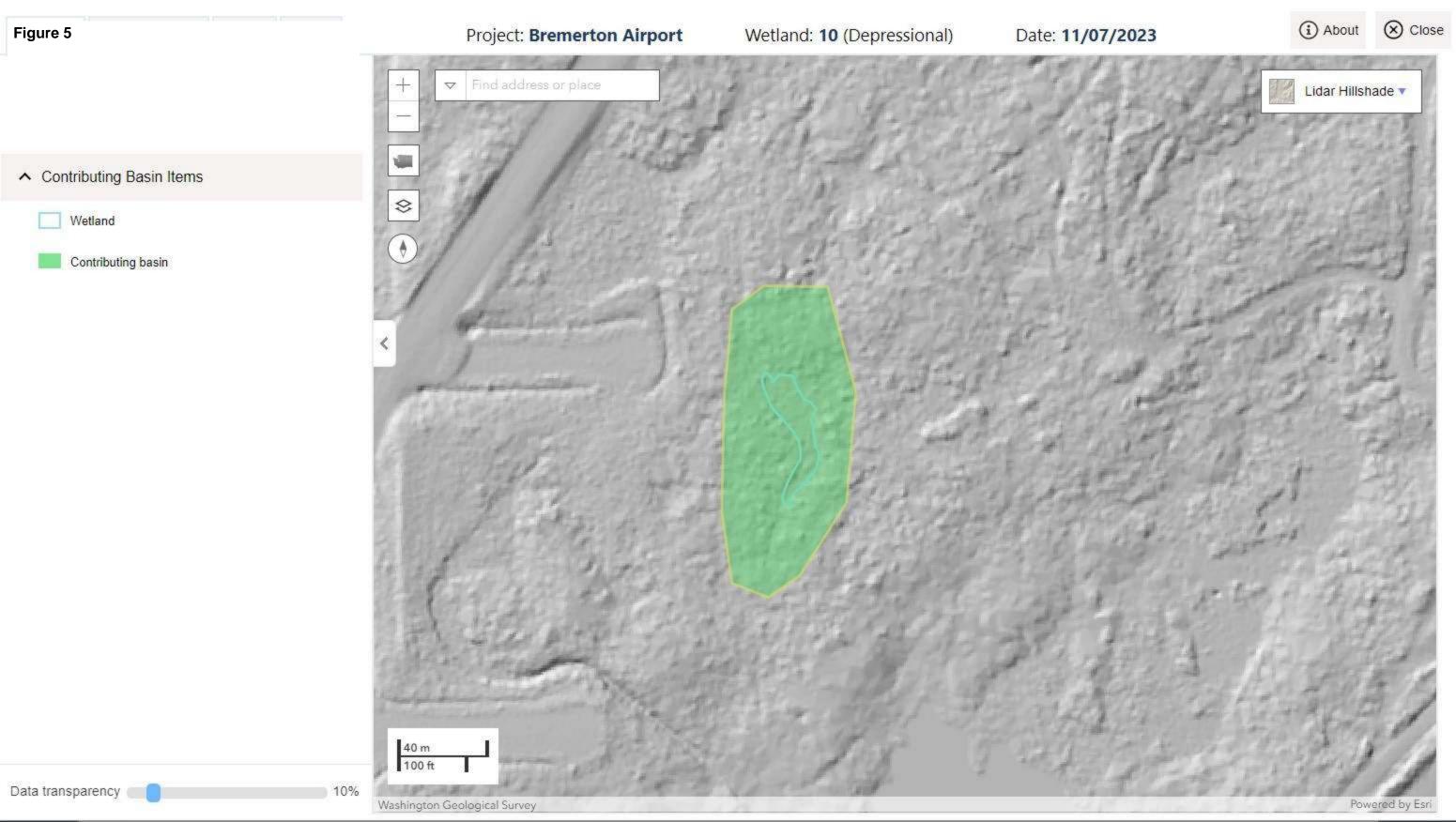
Final Category: Not Applicable

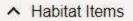




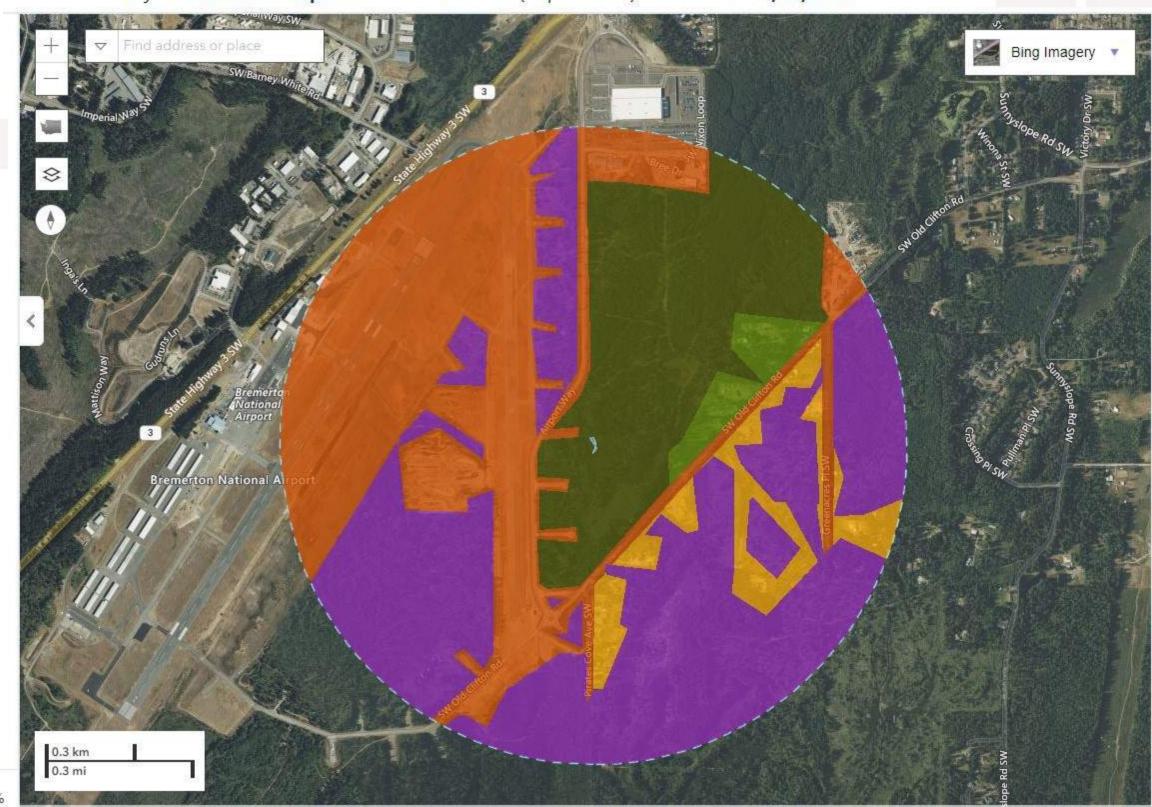


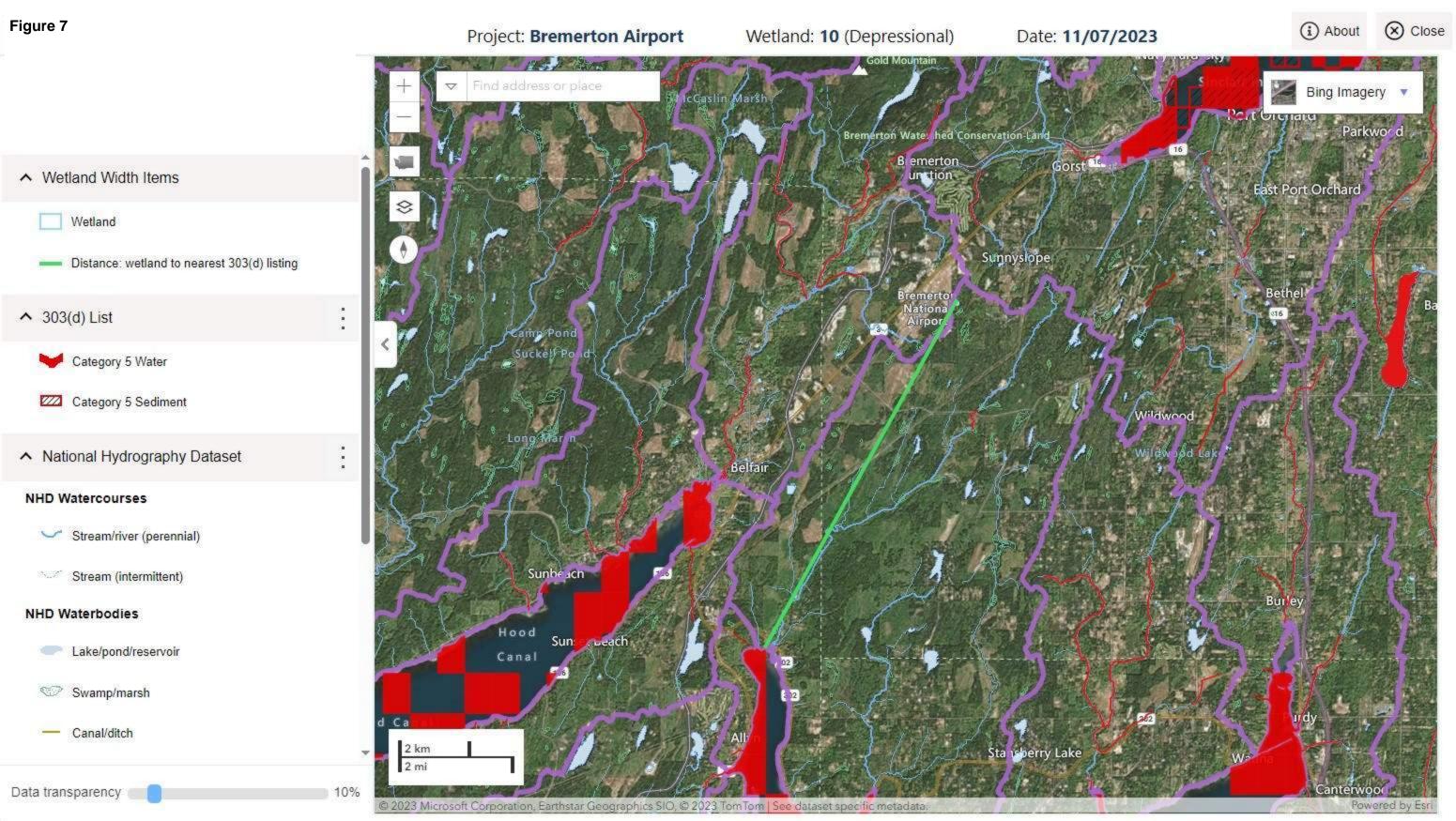


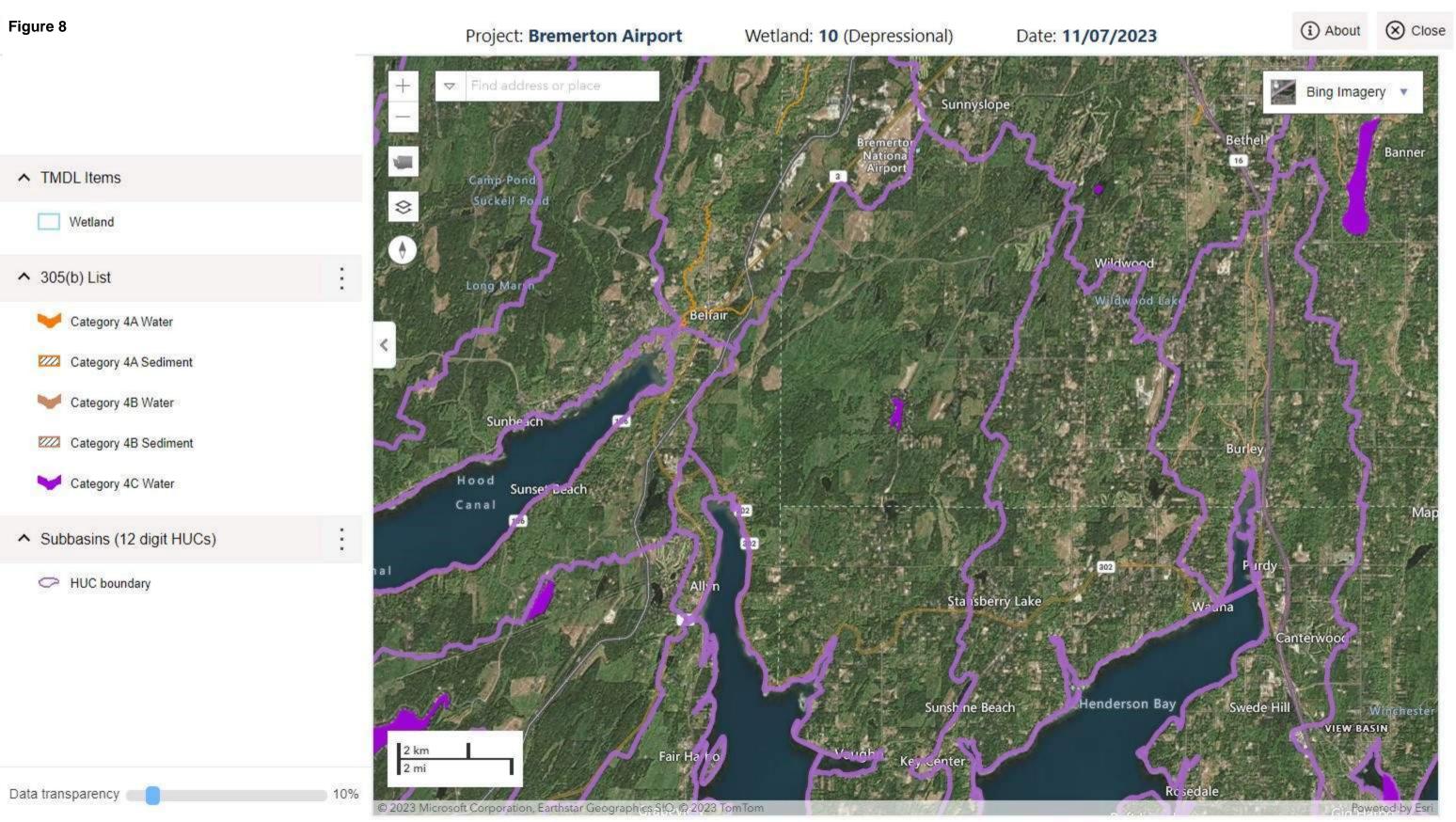




- Relatively undisturbed accessible
- Low/Moderate intensity accessible
- Relatively undisturbed not accessible
- Low/Moderate intensity not accessible
- High Intensity
- Wetland
- Unmapped wetland buffer (1 km)







# **RATING SUMMARY - Western Washington**

Name of wetland (or ID#): 11 Date of site visit: 11/06/2023

Rated By: Matthew Evinger Trained by Ecology? Yes [X] No [] Date of Training:

06/09/2022

**HGM Class used for rating:** Depressional **Wetland has multiple HGM classes? Yes** [] **No** [X]

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

**OVERALL WETLAND CATEGORY: [Category III]** (based on functions [X] 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

Score Based on Ratings	8	5	5	18
Value	Н	L	L	Total
Landscape Potential	M	M	Н	
Site Potential	Н	M	L	
FUNCTION	Improving Water Quality	Hydrologic	Habitat	

# 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	
Wetland of High Conservation Value	
Bog	
Forested	
Coastal Lagoon	
Interdunal	
None of the above	Not Applicable

### Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

<u>Bepressional vvedarias</u>		
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 (can be added to map of hydroperiods)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	D 2.2, D 5.2	
Map of the contributing basin	D 4.3, D 5.3	
1km Polygon: Area that extends 1km 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	

### **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 t	o improve water quality?			
<b>D 1.1</b> What are the characteristics of surf	ace water outflows from the wetland?			
Wetland has no surface water outlet.		points = 3		
Wetland has an intermittently flowing, or	highly constricted, outlet.	points = 2		
Wetland has an unconstricted, or slightly permanently flowing	constricted, surface outlet that is	points = 1		
Wetland is a flat depression whose outlet	is a permanently flowing ditch.	points = 1	Score:	3
D 1.2 Can the soil 2in below the surface b	pe identified as true clay or organic soil?			
Mapped as true clay or organic (muck or	peat)	points = 4		
Soil texture identified as clay or organic in	n field	points = 4		
Soil texture identified as clay or organic b	y laboratory test	points = 4		
None of the above		points = 0	Score:	0
D 1.3 What are the characteristics and dis	stribution of persistent plants?			
Wetland has persistent, ungrazed, plants	> 95% of area	points = 5		
Wetland has persistent, ungrazed, plants	> 50% of area	points = 3		
Wetland has persistent, ungrazed plants	> 10% of area	points = 1		
Wetland has persistent, ungrazed plants	< 10% of area	points = 0	Score:	5
<b>D 1.4</b> What are the characteristics of season	onal ponding or inundation in the wetland area	?		
Area seasonally ponded is > 50% total ar	ea of wetland	points = 4		
Area seasonally ponded is > 25% total ar	ea of wetland	points = 2		
Area seasonally ponded is < 25% total ar	ea of wetland	points = 0	Score:	4
		Total for D 1:	12	
Rating of Site Potential	[X] <b>12-16</b> = <b>H</b> [ ] <b>6-11</b> = <b>M</b> [ ] <b>0-5</b> = <b>L</b>	Record the rating on t	the first p	ag

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	points = 1		
No	points = 0	Score:	0
D 2.2 <u>Is &gt;10% of the area within 150ft of the wetland in land uses that generate pollutant</u>	ts in surface runoff?		
Yes	points = 1		
No	points = 0	Score:	1
D 2.3 Are there septic systems within 250ft of the wetland?			
Yes	points = 1		
No	points = 0	Score:	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?	
Yes	points = 1		
No	points = 0	Score:	0

Total for D 2:  Record the rating on to	<b>1</b> the first pag
Record the rating on t	<b>1</b> the first pag
	the first pag
ociety?	
cicty.	
ake, or marine water that is on th	<u>ie 303(d)</u>
points = 1	
points = 0	Score: 0
e 303(d) list?	
points = 1	
points = 0	Score: 1
а	points = 1 points = 0 e 303(d) list? points = 1

Rating of Value

No

[X] 2-4 = H[] 1 = M[] 0 = L

D 3.3 Has the site been identified in a watershed or local plan as important for maintaining water quality?

Record the rating on the first page

Total for D 3:

Score: 2

3

points = 2points = 0

### **DEPRESSIONAL AND FLATS WETLANDS**

**Hydrologic Functions** - Indicators that the site functions to reduce flooding and stream degradtion

### D 4.0 Does the site have the potential to reduce flooding and erosion?

<b>D 4.1</b> What are the characteristics of surface water outflows from the wetland?		
Wetland has no surface water outlet.	points = 4	
Wetland has an intermittently flowing, or highly constricted, outlet.	points = 2	
Wetland is a flat depression whose outlet is a permanently flowing ditch.	points = 1	
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	Score: 4
D 4.2 What is the depth of storage during the wet periods?		
Marks of ponding are 3ft or more above the surface or bottom of the outlet.	points = 7	
Marks of ponding are between 2ft to <3ft from the surface or bottom of the outlet.	points = 5	
Marks of ponding are at least 0.5ft to <2ft from the surface or the bottom of the outlet.	points = 3	
The wetland is a "headwater" wetland.	points = 3	
The wetland is flat but has small depressions on the surface that trap water.	points = 1	
Marks of ponding are less than 0.5ft (6in).	points = 0	Score: 3

Wetland name or number: 11				
D 4.3 What is the contribution of the	wetland to storage in the watershed?			
The area of the basin is less than 10 t	imes the area of the unit	points = 5		
The area of the basin is 10 to 100 time	es the area of the unit	points = 3		
The area of the basin is more than 10	00 times the area of the unit	points = 0		
Entire wetland is in the Flats class		points = 5	Score:	3
		Total for D 4:	10	
Rating of Site Potential	[] 12-16 = H [X] 6-11 = M [] 0-5 = L	Record the rating on t	the first p	age
D 5.0 Does the landscape have the	potential to support hydrologic functions of t	he site?		
D 5.1 Does the wetland unit receive s	stormwater discharges?			
Yes		points = 1		
No		points = 0	Score:	0
<b>D 5.2</b> <u>Is &gt;10% of the area within 150</u>	ft of the wetland in land uses that generate exces	ss runoff?		
Yes		points = 1		
No		points = 0	Score:	1
D 5.3 Is more than 25% of the contri	buting basin of the wetland covered with intensiv	e human land uses?		
Yes		points = 1		
No		points = 0	Score:	1
		Total for D 5:	2	
Rating of Landscape Potential	[] 3 = H [X] 1-2 = M [] 0 = L	Record the rating on t	the first p	age
D 6.0 Are the hydrologic functions	provided by the site valuable to society?			
<b>D 6.1</b> <u>Is the wetland in a landscape the properties of the contract of the landscape that the properties of the contract of the landscape that the contract of the landscape that the landscape that the landscape the landscape that the lands</u>	nat has flooding problems?			
Flooding occurs in a sub-basin that is	immediately down-gradient of the wetland.	points = 2		
Surface flooding problems are in a su	ıb-basin farther down-gradient.	points = 1		
Flooding from groundwater is an issu	ue in the basin.	points = 1		
The existing or potential outflow from	n the wetland is so constrained that water	points = 0		
cannot reach areas that flood.		points – 0		
There are no problems with flooding	downstream of the wetland.	points = 0	Score:	0
<b>D 6.2</b> Has the site been identified as	important for flood storage or flood conveyance	<u>in a regional flood contro</u>	<u>ol plan?</u>	
Yes		points = 2		
No		points = 0	Score:	0
		Total for D 6:	0	

**Rating of Value** 

[] **2-4** = **H**[] **1** = **M**[X] **0** = **L** 

Record the rating on the first page

# **HABITAT FUNCTIONS**

**These questions apply to wetlands of all HGM classes** - Indicators that the site functions to provide important habitat

# H 1.0 Does the wetland have the potential to provide habitat for many species?

H 1.1 What is the structure of the plant community?			
Aquatic Bed			
<b>✓</b> Emergent			
✓ Scrub-shrub			
Forested			
Multiple strata within the Forested class (canopy, sub-canopy, shrubs, herbaceous,			
moss/ground cover)			
4 structures or more	points = 4		
3 structures	points = 2		
2 structures	points = 1		
1 structure	points = 0		
No structures present	points = 0	Score:	1
H 1.2 What are the hydroperiods that meet the size thresholds in the wetland?			
Permanently flooded or inundated			
Seasonally flooded or inundated			
Occasionally flooded or inundated			
Saturated only			
Permanently flowing stream or river in, or adjacent to, the wetland			
Seasonally flowing stream in, or adjacent to, the wetland			
Lake Fringe wetland			
Freshwater Tidal wetland			
4 or more types present	points = 3		
3 types present or Lake Fringe / Freshwater Tidal Fringe	points = 2		
2 types present	points = 1		
1 type present	points = 0		
None present	points = 0	Score:	0
H 1.3 What is the richness of the plant species in the wetland?			
>19 species	points = 2		
5-19 species	points = 1		
<5 species	points = 0	Score:	1

H 1.4 What is the interspersion of habitats?			
High	points = 3		
Moderate	points = 2		
Low	points = 1		
None	points = 0	Score:	1
H 1.5 What are the special habitat features in the wetland?			
Large, downed, woody debris within the wetland (>4in diameter and 6ft long).			
Standing snags (dbh >4in) within the wetland			
Undercut banks are present for at least 6.6ft (2m) and/or overhanging plants			
extend at least 3.3ft (1m) over open water or a stream (or ditch) in, or contiguous with			
the wetland, for at least 33ft (10m)			
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 (cut shrubs			
or trees that have not yet weathered where wood is exposed)			
At least 0.25ac of thin-stemmed persistent plants or woody branches are present			
in areas that are permanently or seasonally inundated (structures for egg-laying by			
amphibians)			
Invasive plants cover less than 25% of the wetland area in every stratum of plants			
(see H 1.1 for list of strata)			
6 habitats selected	points = 6		
5 habitats selected	points = 5		
4 habitats selected	points = 4		
3 habitats selected	points = 3		
2 habitats selected	points = 2		
1 habitat selected	points = 1		
No habitats selected	points = 0	Score:	0
	Total for H 1:	3	

**Rating of Site Potential** 

[] 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 habitat functions of the site?

H 2.1 What is the percentage of accessible habitat within 1km of the wetland?		
>33% of 1km Polygon	points = 3	
20-33% of 1km Polygon	points = 2	
10-19% of 1km Polygon	points = 1	
<10% of 1km Polygon	points = 0	Score: 3
H 2.2 What is the percentage of total habitat in a 1km polygon around the wetland?		
Total habitat is >50% of the Polygon	points = 3	
Total habitat is 10-50% of the Polygon and in 1-3 patches	points = 2	
Total habitat is 10-50% of the Polygon and in >3 patches	points = 1	
Total habitat is <10% of the Polygon	points = 0	Score: 3

۱۸	lotlar	n be	ama	or	nun	nher:	11

Total for H 2:	6	
<50% of the Polygon is high intensity land use points = 0	Score:	0
50% of the Polygon is high intensity land use points = -2		
H 2.3 What is the land use intensity in the 1km polygon?		

**Rating of Landscape Potential** 

[X] **4-6** = **H** [ ] **1-3** = **M** [ ] **0** = **L** 

Record the rating on the first page

# H 3.0 Is the habitat provided by the site valuable to society?

1	Total for H 3:	0	
The site does not meet any of the criteria for societal value poi	nts = 0	Score:	0
·	nts = 1		
for societal value	1165 – 2		
The wetland has 3 or more WDFW priority habitats within 100m, or meets the criteria	nts = 2		
The wetland has been categorized as an important habitat site in a local plan			
The wetland is a Wetland of High Conservation Value			
The wetland is mapped as a location for an individual WDFW priority species			
The wetland provides habitat for Threatened or Endangered species			
The following criteria automatically score 2 points:			
Talus			
Snags and Logs			
Cliffs			
Caves			
Nearshore (Coastal, Open Coast, Puget Sound)			
Instream			
Fresh Deepwater			
Westside Prarie			
Riparian			
Oregon White Oak			
Old-growth/Mature Forests			
Herbaceous Balds			
Biodiversity Areas and Corridors			
Aspen Stands			
H 3.1 Does the site provide habitat for species valued in laws, regulations, or policies?			

**Rating of Value** 

[] 2 = H[] 1 = M[X] 0 = L

Record the rating on the first page

# **CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS**

#### **SC 1.0 Estuarine Wetlands**

SC 1.1 Does the wetland meet all of the following criteria for Estuarine wetlands?	
The dominant water regime is tidal	
The wetland is vegetated	
The water salinity is greater than 0.5 ppt	
Yes - Go to SC 1.2	
No - Not an Estuarine Wetland	: Not an ine Wetland
SC 1.2 Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Al	rea Preserve,
State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151?	
Yes - Category I Estuarine Wetland	
No - Go to SC 1.3	•
	•
SC 1.3 Is the wetland unit at least 1ac in size and meets at least two of the following three conditions?	
The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and	
has less than 10% cover of non-native plant species.	
At least 75% of the landward edge of the wetland has a 100ft buffer of shrub, forest, or un-	
grazed or un-mowed grassland	
The wetland has at least two of the following features: tidal channels, depressions with open	
water, or contiguous freshwater wetlands.	
Vos. Catagony I Estuarina Watland	
Yes - Category I Estuarine Wetland  No - Category II Estuarine Wetland  Result:	
5 ,	•
SC 2.0 Wetlands of High Conservation Value	
SC 2.1 Does the wetland overlap with any known or historical rare plant or rare & high-quality ecosystem	polygons on the
WNHP Data Explorer?	
Yes - Category I Wetland of High Conservation Value	
No - Go to SC 2.2 Result:	: Go to SC 2.2
SC 2.2 Does the wetland have a rare plant species, rare plant community, or high-quality common plant community.	community that
may qualify the site as a WHCV?	
Yes - Category I Wetland of High Conservation Value	
No - Not a Wetland of High Conservation Value Result:	•

SC 3.0 Bogs	
SC 3.1 Does an area within the wetland unit have organic soil horizons, either peats or mucks, tha	t compose 16in or more
of the first 32in of the soil profile?	
Yes - Go to SC 3.3	
No - Go to SC 3.2	Result: Go to SC 3.2
SC 3.2 Does an area within the wetland unit have organic soils, either peats or mucks, that are less	·
bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a	lake or pond?
V 6 1 6622	
Yes - Go to SC 3.3	Decelo Net - Dece
No - Not a Bog Wetland	Result: Not a Bog Wetland
SC 2.2 Dans on a way with mosts on available have made their 700% sever of made at a way and level. A	
SC 3.3 Does an area with peats or mucks have more than 70% cover of mosses at ground level, A plant species listed in the table provided in the instructions?	ND at least 30% cover of
plant species listed in the table provided in the histractions:	
Yes - Category I Bog Wetland	
No - Go to SC 3.4	Result:
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, wester	ern red cedar, western
hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of the	<u>ne species (or</u>
combinations of species) listed in the table found in the instructions provide more than 30% of the	e cover under the
<u>canopy?</u>	
Yes - Category I Bog Wetland	B 1
No - Not a Bog Wetland	Result:
SC 4.0 Forested Wetlands	
SC 4.1 Does the wetland have at least 1 contiguous acre of forest that meets one of the following	<u>criteria?</u>
Old-growth forests	
Mature forests	
Yes - Category I Forested Wetland	
No - Not a Forested Wetland	Result: Not a Forested
	Wetland

## **SC 5.0 Wetlands in Coastal Lagoons**

SC 5.1 Coastal Lagoons: Does the wetland meet all of the following criteria of a wetland in a coast	tal lagoon?
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 rocks	
The depression in which the wetland is located contains ponded water that is saline or brackisl	h
(>0.5 ppt) during most of the year in at least a portion of the open water area (measured near the	
bottom)	
Yes - Go to SC 5.2	
No - Not a Coastal Lagoon Wetland	Result: Not a Coastal
	Lagoon Wetland
SC 5.2 Does the wetland meet all of the following three conditions?	
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).	
At least 75% of the landward edge of the wetland has a 100ft buffer of shrub, forest, or un-	
grazed or un-mowed grassland.	
the wetland is larger than 0.10ac (4350 sqft)	
V 6	
Yes - Category I Coastal Lagoon	B 16
No - Category II Coastal Lagoon	Result:
SC 6.0 Interdunal Wetlands	
SC 6.1 Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownersh	<u>ip WBUO)?</u>
Yes - Go to SC 6.2	
No - Not an Interdunal Wetland	Result: Not an
Not all interdunal Wedana	Interdunal Wetland
SC 6.2 Is the wetland 1ac or larger in size, or a mosaic that is 1ac or larger in size?	
Wetland is larger than 1ac in size - Go to SC 6.3	
Wetland is a mosaic larger than 1ac is size - Category II Interdunal Wetland	
No - Go to SC 6.4	Result:
SC 6.3 Does the wetland score 8 or 9 points for the habitat functions?	
Yes - Category I Interdunal Wetland	
No - Category II Interdunal Wetland	Result:
SC 6.4 Is the wetland unit between 0.1ac and 1ac, or in a mosaic of wetlands that is between 0.1ac	c and 1ac in size?
Yes - Category III Interdunal Wetland	
No - Category IV Interdunal Wetland	Result:

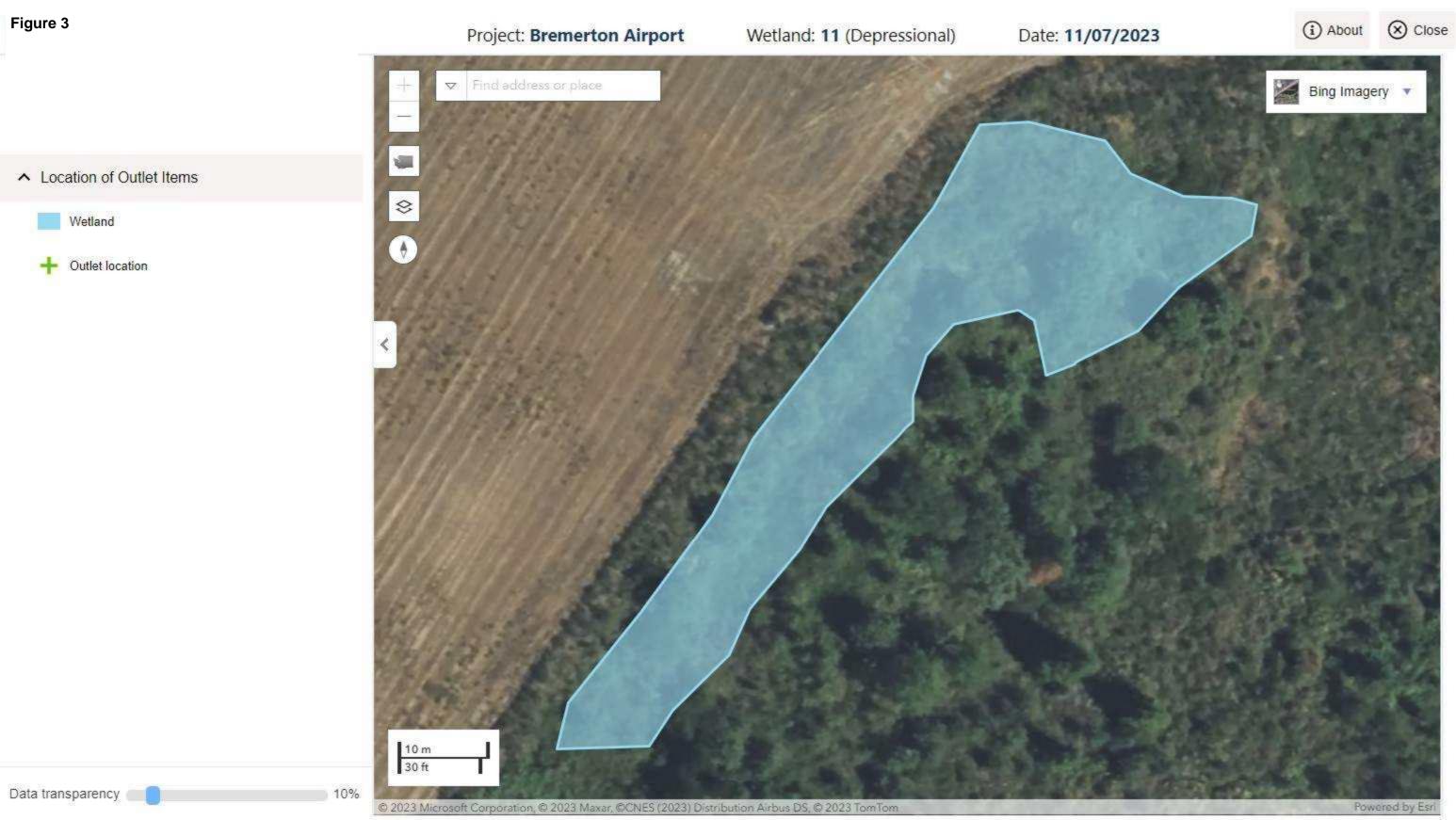
**Category of wetland based on Special Characteristics** 

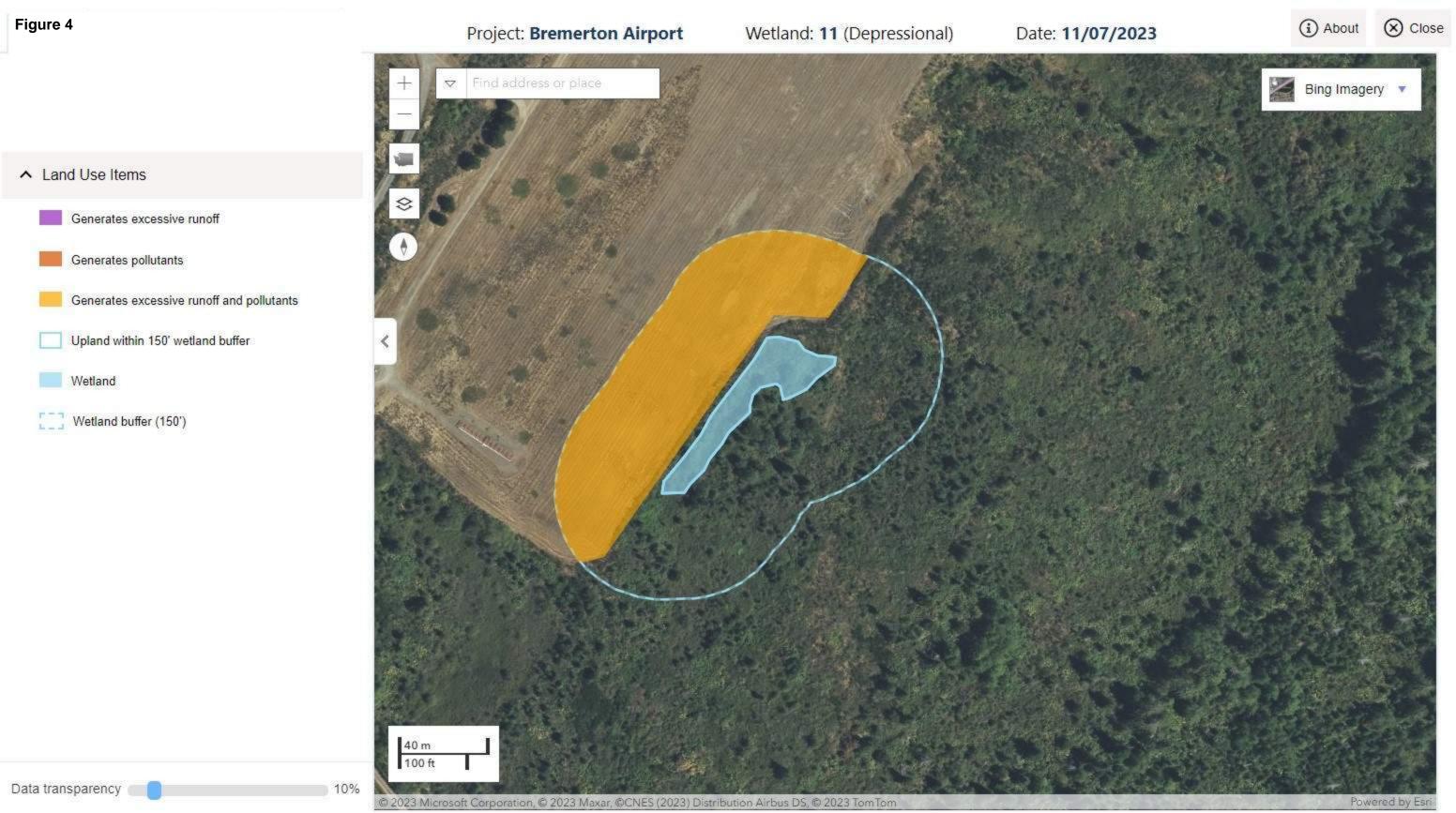
If you answered No for all types, enter "Not Applicable" on Summary Form

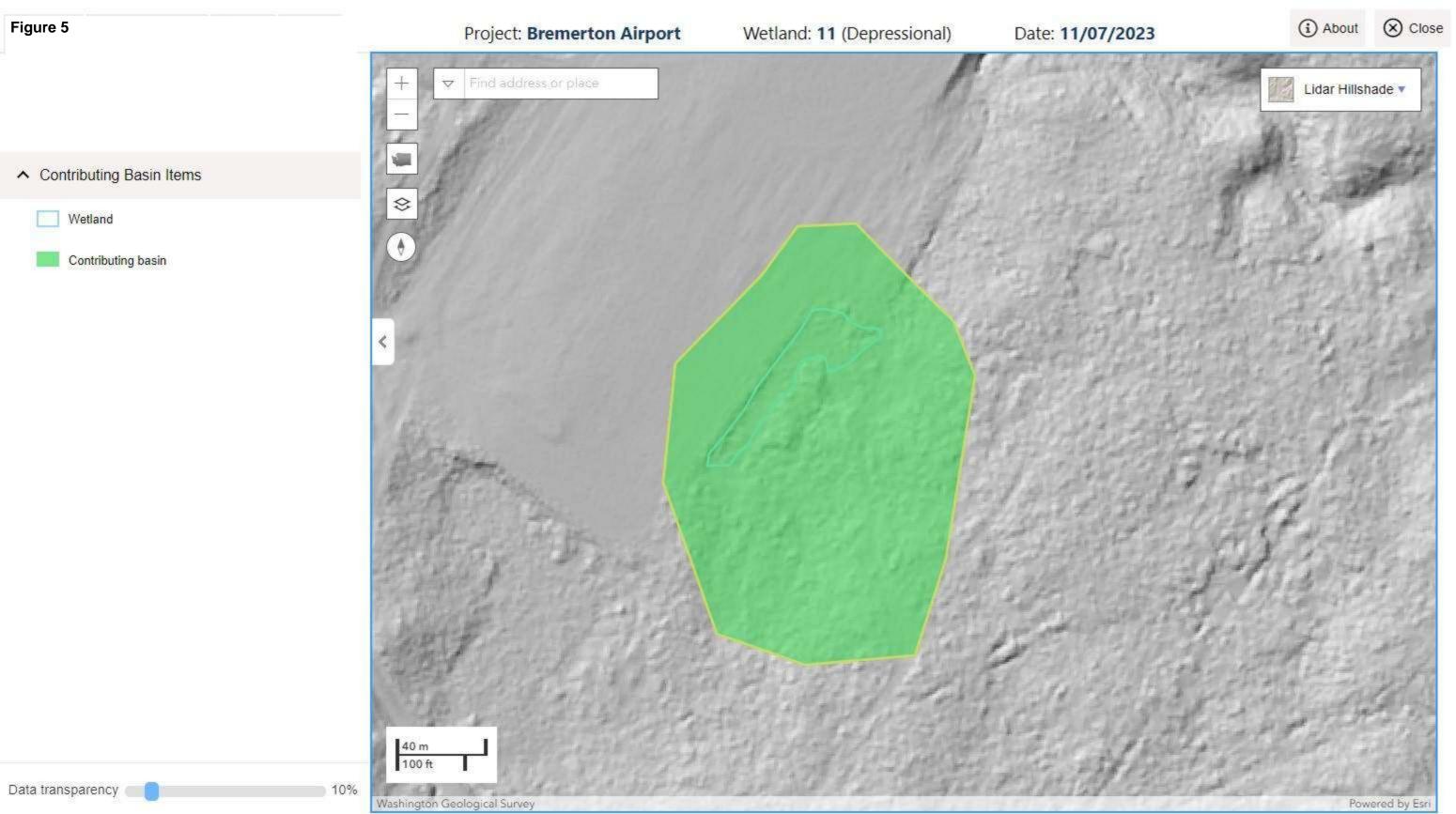
Final Category: Not Applicable

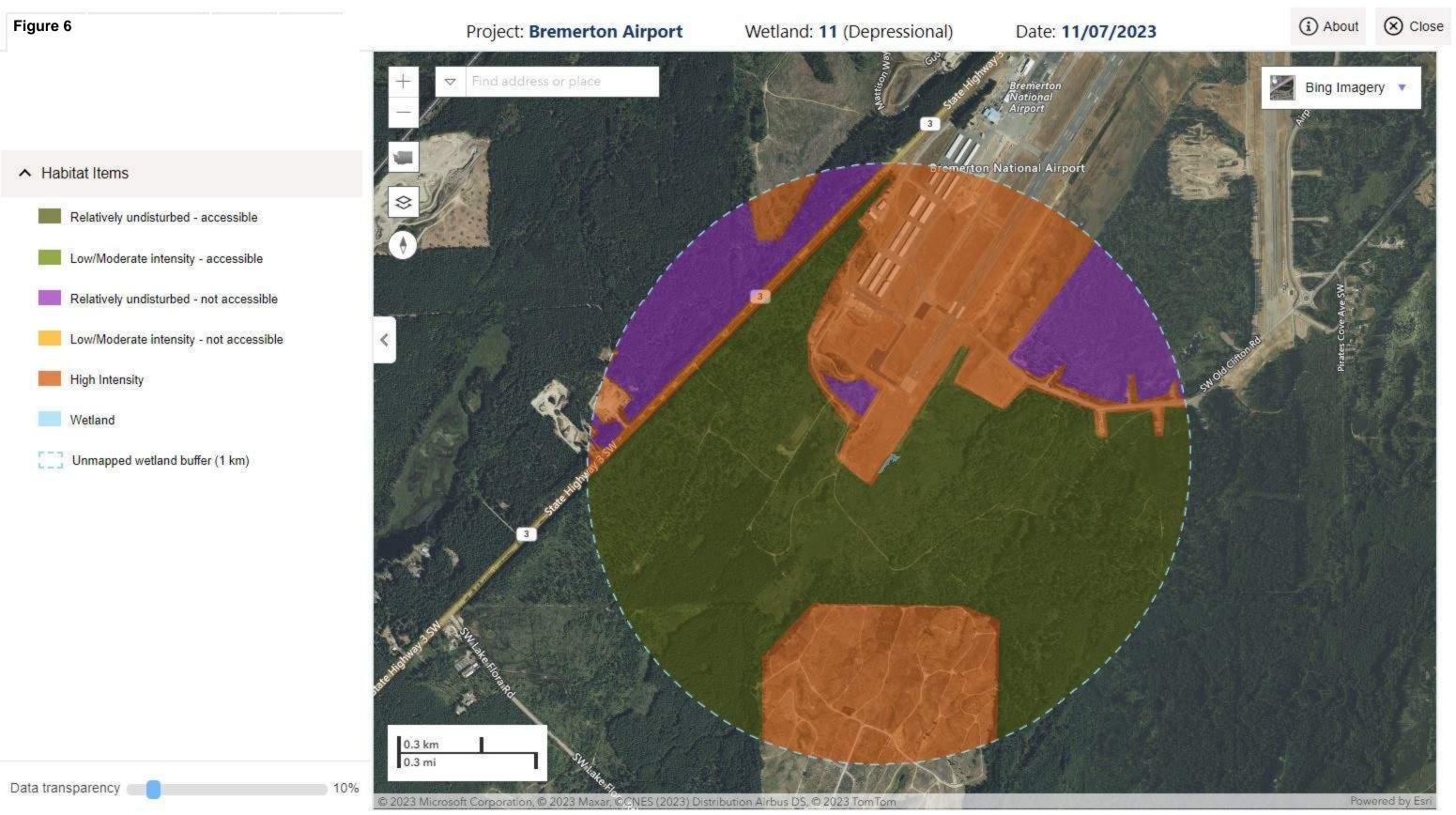


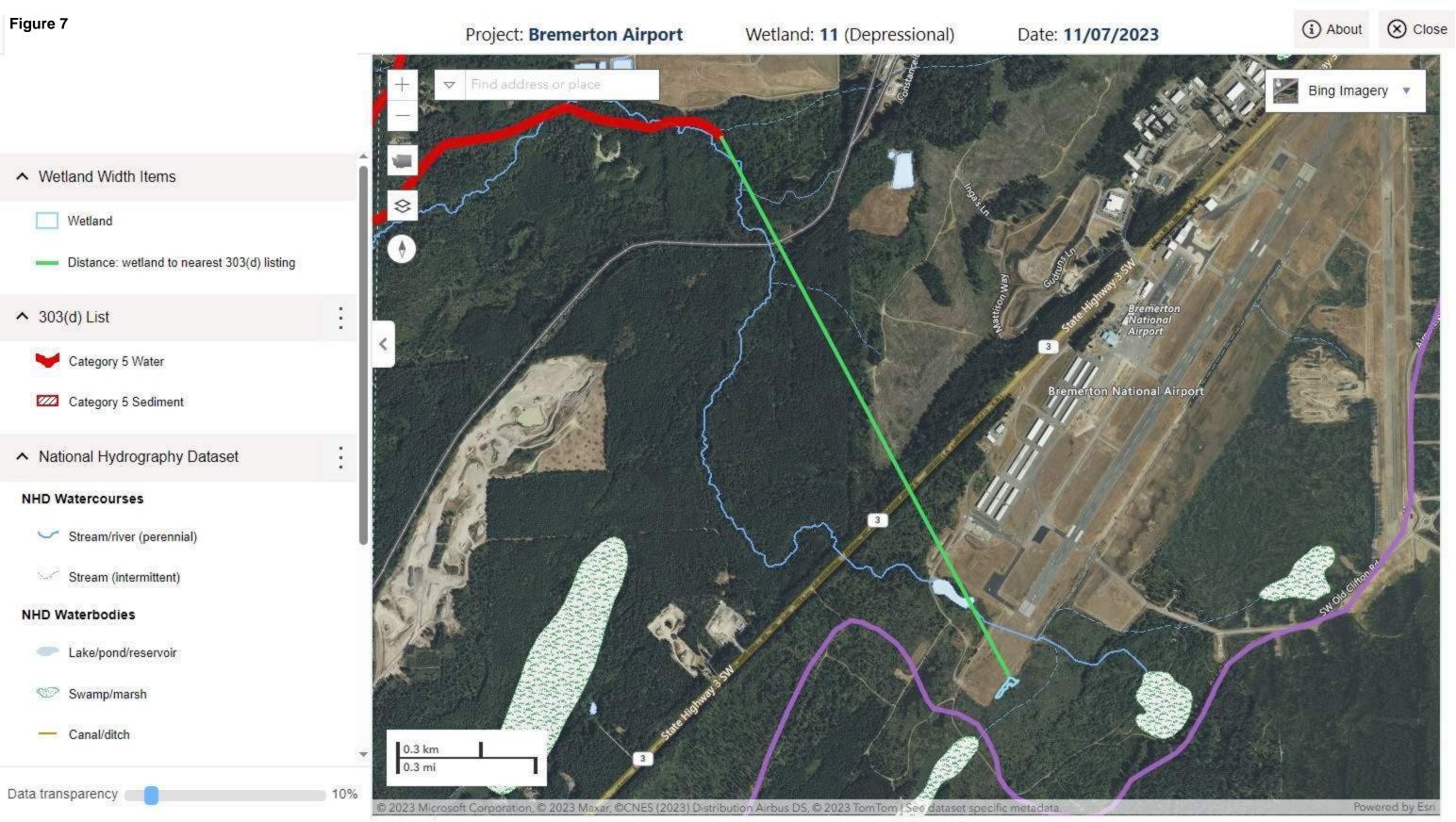


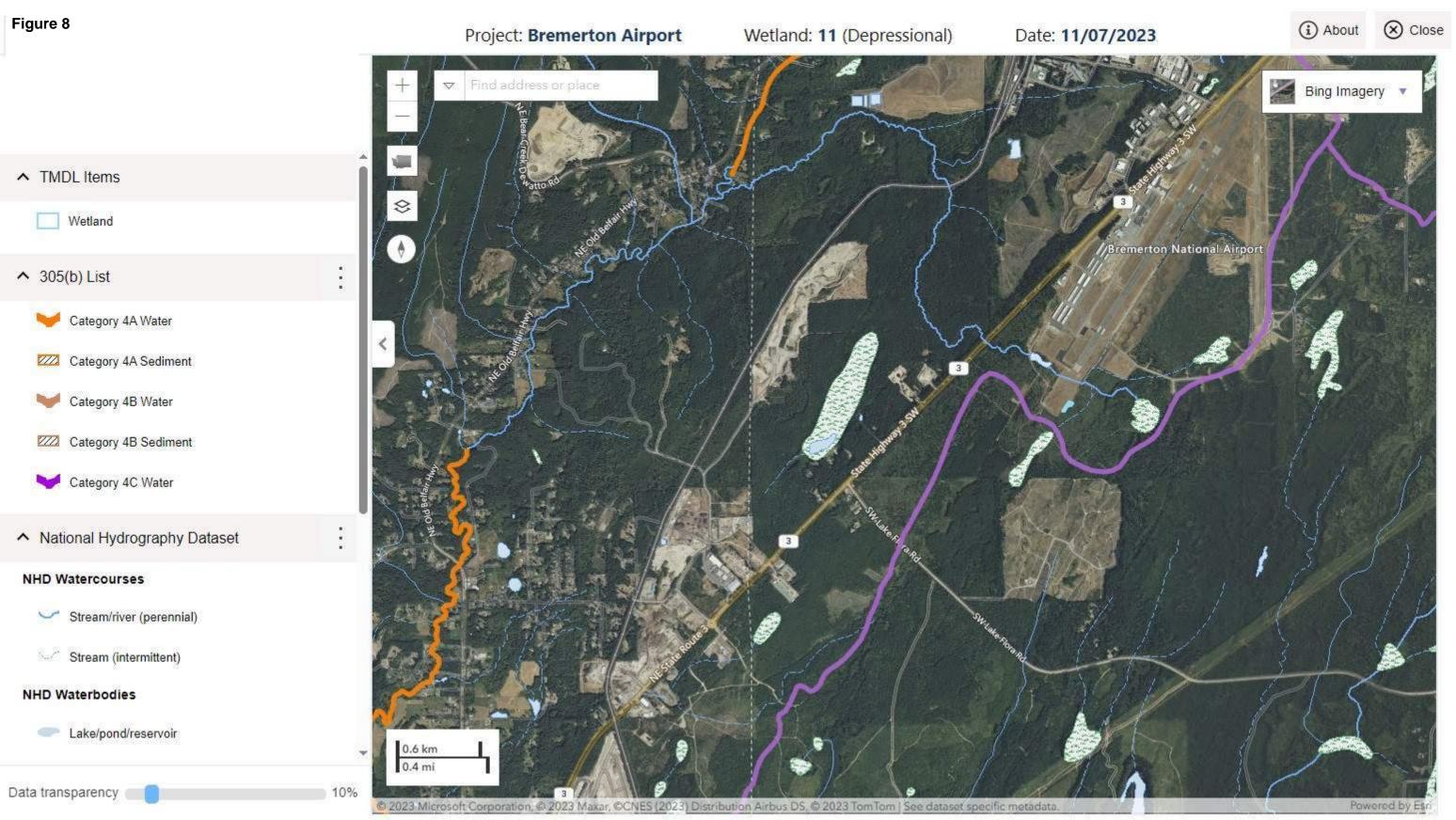












# **RATING SUMMARY - Western Washington**

Name of wetland (or ID#): 12 Date of site visit: 11/06/2023

Rated By: Matthew Evinger Trained by Ecology? Yes [X] No [] Date of Training: 06/09/2022

**HGM Class used for rating:** Depressional **Wetland has multiple HGM classes? Yes** [] **No** [X]

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

Source of base aerial photo/map:

OVERALL WETLAND CATEGORY: [Category III] (based on functions [X] 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

Ratings	8	5	5	18
Score Based on				
Value	н	L	М	Total
Landscape Potential	Н	Н	М	
Site Potential	M	L	L	
FUNCTION	Improving Water Quality	Hydrologic	Habitat	

# 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 5 = 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	
Wetland of High Conservation Value	
Bog	
Forested	
Coastal Lagoon	
Interdunal	
None of the above	Not Applicable

# Maps and figures required to answer questions correctly for Western Washington

## <u>Depressional Wetlands</u>

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 (can be added to map of hydroperiods)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	D 2.2, D 5.2	
Map of the contributing basin	D 4.3, D 5.3	
1km Polygon: Area that extends 1km 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	

# **DEPRESSIONAL AND FLATS WETLANDS**

Water Quality Functions - Indicators that the site functions to improve water quality

D 1.0 Does the site have the poter	ntial to improve water quality?			
D 1.1 What are the characteristics	of surface water outflows from the wetland?			
Wetland has no surface water out	let.	points = 3		
Wetland has an intermittently flow	ring, or highly constricted, outlet.	points = 2		
Wetland has an unconstricted, or spermanently flowing	slightly constricted, surface outlet that is	points = 1		
Wetland is a flat depression whose	e outlet is a permanently flowing ditch.	points = 1	Score:	2
D 1.2 Is the soil 2 in. below the sur	rface a true clay or organic soil?			
Mapped as true clay or organic (m	nuck or peat)	points = 4		
Soil texture identified as clay or or	ganic in field	points = 4		
Soil texture identified as clay or or	ganic by laboratory test	points = 4		
None of the above		points = 0	Score:	0
D 1.3 What are the characteristics	and distribution of persistent plants?			
Wetland has persistent, ungrazed,	plants > 95% of area	points = 5		
Wetland has persistent, ungrazed,	plants > 50% of area	points = 3		
Wetland has persistent, ungrazed	plants > 10% of area	points = 1		
Wetland has persistent, ungrazed	plants < 10% of area	points = 0	Score:	5
D 1.4 What are the characteristics	of seasonal ponding or inundation in the wetland	d area?		
Area seasonally ponded is > 50% t	total area of wetland	points = 4		
Area seasonally ponded is equal to	o or > 25% total area of wetland	points = 2		
Area seasonally ponded is < 25% t	total area of wetland	points = 0	Score:	4
		Total for D 1:	11	
Rating of Site Potential	[] 12-16 = H [X] 6-11 = M [] 0-5 = L	Record the rating on t	he first p	 oag

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	points = 1			
No	points = 0	Score:	1	
D 2.2 Is >10% of the area within 150ft of the wetland in land uses the	at generate pollutants in surface runoff?			
Yes	points = 1			
No	points = 0	Score:	1	
D 2.3 Are there septic systems within 250ft of the wetland?				
Yes	points = 1			
No	points = 0	Score:	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	3?		
Yes	points = 1			
No	points = 0	Score:	1	

D 2.5 What are the other sources of pollutants coming into the wetland?	
airplane exhaust	
Total for D 2:	3

Rating of Landscape Potential [X] 3-4 = H [] 1-2 = 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	points = 1			
No	points = 0	Score:	0	
D 3.2 Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list?				
Yes	points = 1			
No	points = 0	Score:	1	
D 3.3 Has the site been identified in a watershed or local plan as important for maintaining water quality?				
Yes	points = 2			
No	points = 0	Score:	2	
	Total for D 3:	3		

Rating of Value [X] 2-4 = H [] 1 = M [] 0 = L Record the rating on the first page

# **DEPRESSIONAL AND FLATS WETLANDS**

**Hydrologic Functions** - Indicators that the site functions to reduce flooding and stream degradtion

#### D 4.0 Does the site have the potential to reduce flooding and erosion?

D 4.1 What are the characteristics of surface water outflows from the wetland?		
Wetland has no surface water outlet.	points = 4	
Wetland has an intermittently flowing, or highly constricted, outlet.	points = 2	
Wetland is a flat depression whose outlet is a permanently flowing ditch.	points = 1	
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	Score: 2
D 4.2 What is the depth of storage during the wet periods?		
Marks of ponding are 3ft or more above the surface or bottom of the outlet.	points = 7	
Marks of ponding are between 2ft to <3ft from the surface or bottom of the outlet.	points = 5	
Marks of ponding are at least 0.5ft to <2ft from the surface or the bottom of the outlet.	points = 3	
The wetland is a "headwater" wetland.	points = 3	
The wetland is flat but has small depressions on the surface that trap water.	points = 1	
Marks of ponding are less than 0.5ft (6in).	points = 0	Score: 3

Wetland name or number: 12				
D 4.3 What is the contribution of the	wetland to storage in the watershed?			
The area of the basin is less than 10	times the area of the unit	points = 5		
The area of the basin is 10 to 100 tir	mes the area of the unit	points = 3		
The area of the basin is more than 1	00 times the area of the unit	points = 0		
Entire wetland is in the Flats class		points = 5	Score:	0
		Total for D 4:	5	
Rating of Site Potential	[] 12-16 = H[] 6-11 = M[X] 0-5 = L	Record the rating on t	he first p	nage
D 5.0 Does the landscape have the p	potential to support hydrologic functions of the	site?		
D 5.1 Does the wetland unit receive	stormwater discharges?			
Yes		points = 1		
No		points = 0	Score:	1
<b>D 5.2</b> <u>Is &gt;10% of the area within 150</u>	ft of the wetland in land uses that generate exce	ess runoff?		
Yes		points = 1		
No		points = 0	Score:	1
D 5.3 Is more than 25% of the contri	buting basin of the wetland covered with intensi	ve human land uses?		
Yes		points = 1		
No		points = 0	Score:	1
		Total for D 5:	3	
Rating of Landscape Potential	[X] 3 = H [] 1-2 = M [] 0 = L	Record the rating on t	he first p	age
D 6.0 Are the hydrologic functions p	provided by the site valuable to society?			
D 6.1 Is the wetland in a landscape t	that has flooding problems?			
Flooding occurs in a sub-basin that i	is immediately down-gradient of the wetland.	points = 2		
Surface flooding problems are in a s	sub-basin farther down-gradient.	points = 1		

D 6.1 Is the wetland in a landscape that has flooding problems?

Flooding occurs in a sub-basin that is immediately down-gradient of the wetland.

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

Flooding from groundwater is an issue in the basin.

The existing or potential outflow from the wetland is so constrained that water cannot reach areas that flood.

There are no problems with flooding downstream of the wetland.

points = 0

Score: 0

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

Yes points = 2

No points = 0 **Score: 0** 

Total for D 6:

0

**Rating of Value** 

[] 2-4 = H[] 1 = M[X] 0 = L

Record the rating on the first page

# **HABITAT FUNCTIONS**

**These questions apply to wetlands of all HGM classes** - Indicators that the site functions to provide important habitat

## H 1.0 Does the wetland have the potential to provide habitat for many species?

H 1.1 What is the structure of the plant community?			
Aquatic Bed			
<b>✓</b> Emergent			
Scrub-shrub			
Forested			
Multiple strata within the Forested class (canopy, sub-canopy, shrubs,			
herbaceous, moss/ground cover)			
4 structures or more	points = 4		
3 structures	points = 2		
2 structures	points = 1		
1 structure	points = 0		
No structures present	points = 0	Score:	0
H 1.2 What are the hydroperiods that meet the size thresholds in the wetland?			
Permanently flooded or inundated			
Seasonally flooded or inundated			
Occasionally flooded or inundated			
Saturated only			
Permanently flowing stream or river in, or adjacent to, the wetland			
Seasonally flowing stream in, or adjacent to, the wetland			
Lake Fringe wetland			
Freshwater Tidal wetland			
4 or more types present	points = 3		
3 types present or Lake Fringe / Freshwater Tidal Fringe	points = 2		
2 types present	points = 1		
1 type present	points = 0		
None present	points = 0	Score:	0
H 1.3 What is the richness of the plant species in the wetland?			
>19 species	points = 2		
5-19 species	points = 1		
<5 species	points = 0	Score:	1

H 1.4 What is the interspersion of habitats?		
High	points = 3	
Moderate	points = 2	
Low	points = 1	
None	points = 0	Score: 0
H 1.5 What are the special habitat features in the wetland?		
Large, downed, woody debris within the wetland (>4in diameter and 6ft long).		
Standing snags (dbh >4in) within the wetland		
Undercut banks are present for at least 6.6ft (2m) and/or overhanging plants		
extend at least 3.3ft (1m) over open water or a stream (or ditch) in, or contiguous		
with the wetland, for at least 33ft (10m)		
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 (cut shrubs		
or trees that have not yet weathered where wood is exposed)		
At least 0.25ac of thin-stemmed persistent plants or woody branches are present		
in areas that are permanently or seasonally inundated (structures for egg-laying by		
amphibians)		
Invasive plants cover less than 25% of the wetland area in every stratum of plants		
(see H 1.1 for list of strata)		
6 habitats selected	points = 6	
5 habitats selected	points = 5	
4 habitats selected	points = 4	
3 habitats selected	points = 3	
2 habitats selected	points = 2	
1 habitat selected	points = 1	
No habitats selected	points = 0	Score: 1
	Total for H 1:	2

**Rating of Site Potential** 

[] 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 habitat functions of the site?

H 2.1 What is the percentage of accessible habitat within 1km of the wetland?		
>33% of 1km Polygon	points = 3	
20-33% of 1km Polygon	points = 2	
10-19% of 1km Polygon	points = 1	
<10% of 1km Polygon	points = 0	Score: 0
H 2.2 What is the percentage of total habitat in a 1km polygon around the wetland?		
Total habitat is >50% of the Polygon	points = 3	
Total habitat is 10-50% of the Polygon and in 1-3 patches	points = 2	
Total habitat is 10-50% of the Polygon and in >3 patches	points = 1	
Total habitat is <10% of the Polygon	points = 0	Score: 1

W	atland	d name	or ni	ımher:	12

Wetland name or number: 12			
H 2.3 What is the land use intensity in the 1k	m polygon?		
50% of the Polygon is high intensity land use		points = -2	
<50% of the Polygon is high intensity land us	e	points = 0	Score: 0
		Total for H 2:	1
Rating of Landscape Potential	[] 4-6 = H [X] 1-3 = M [] 0 = L	Record the rating on t	he first page
H 3.0 Is the habitat provided by the site valua	able to society?		
H 3.1 Does the site provide habitat for species	es valued in laws, regulations, or policies?		
Aspen Stands			
Biodiversity Areas and Corridors			
Herbaceous Balds			
Old-growth/Mature Forests			
Oregon White Oak			
✓ Riparian			
Westside Prarie			
Fresh Deepwater			
<b>√</b> Instream			
Nearshore (Coastal, Open Coast, Puget S	ound)		
Caves			
Cliffs			
Snags and Logs			
Talus			
The following criteria automatically score 2 p	points:		
The wetland provides habitat for Threater	ned or Endangered species		
The wetland is mapped as a location for a	an individual WDFW priority species		
The wetland is a Wetland of High Conserv	vation Value		
The wetland has been categorized as an i	important habitat site in a local plan		
The wetland has 3 or more WDFW priority ha	bitats within 100m, or meets the	points = 2	
criteria for societal value		•	
The site has 1 or 2 WDFW priority habitats w		points = 1	
The site does not meet any of the criteria for	societal value	points = 0	Score: 1
		Total for H 3:	1

Rating of Value

[]2 = H[X]1 = M[]0 = L

Record the rating on the first page

# **CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS**

#### **SC 1.0 Estuarine Wetlands**

SC 1.1 Does the wetland meet all of the following criteria for Estuarine wetlands?	
The dominant water regime is tidal	
The wetland is vegetated	
The water salinity is greater than 0.5 ppt	
Yes - Go to SC 1.2	
No - Not an Estuarine Wetland	Result: Not an Estuarine Wetland
SC 1.2 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 332-30-15	
Yes - Category I Estuarine Wetland	
No - Go to SC 1.3	Result:
SC 1.3 Is the wetland unit at least 1ac in size and meets at least two of the following three condi-	tions?
The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and	
has less than 10% cover of non-native plant species.	
At least 75% of the landward edge of the wetland has a 100ft buffer of shrub, forest, or un-	
grazed or un-mowed grassland	
The wetland has at least two of the following features: tidal channels, depressions with open	
water, or contiguous freshwater wetlands.	
Yes - Category I Estuarine Wetland	
No - Category II Estuarine Wetland	Result:
SC 2.0 Wetlands of High Conservation Value	
SC 2.1 Does the wetland overlap with any known or historical rare plant or rare & high-quality eco	system polygons on the
WNHP Data Explorer?	
Yes - Category I Wetland of High Conservation Value	
No - Go to SC 2.2	Result: Go to SC 2.2
SC 2.2 Does the wetland have a rare plant species, rare plant community, or high-quality common	n plant community that
may qualify the site as a WHCV?	
Yes - Category I Wetland of High Conservation Value	
	Result: Not a Wetland
No - Not a Wetland of High Conservation Value	of High Conservation
	Value

SC 3.0 Bogs	
SC 3.1 Does an area within the wetland unit have organic soil horizons, either peats or mucks, the	nat compose 16in or
more of the first 32in of the soil profile?	
Yes - Go to SC 3.3	
No - Go to SC 3.2	Result: Go to SC 3.2
SC 3.2 Does an area within the wetland unit have organic soils, either peats or mucks, that are le	ess than 16 in deep over
bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a	a lake or pond?
Yes - Go to SC 3.3	
No - Not a Bog Wetland	Result: Not a Bog
No - Not a bog Wetland	Wetland
SC 3.3 Does an area with peats or mucks have more than 70% cover of mosses at ground level,	AND at least 30% cover
of plant species listed in the table provided in the instructions?	
Yes - Category I Bog Wetland	
No - Go to SC 3.4	Result:
No - Go to SC 3.4  SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, we	
	stern red cedar, western
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, we	stern red cedar, western he species (or
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, we hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of t	stern red cedar, western he species (or
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, we hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of t combinations of species) listed in the table found in the instructions provide more than 30% of t canopy?	stern red cedar, western he species (or
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, we hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of t combinations of species) listed in the table found in the instructions provide more than 30% of t canopy?  Yes - Category I Bog Wetland	stern red cedar, western he species (or
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, we hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of t combinations of species) listed in the table found in the instructions provide more than 30% of t canopy?	stern red cedar, western he species (or
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, we hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of t combinations of species) listed in the table found in the instructions provide more than 30% of t canopy?  Yes - Category I Bog Wetland	stern red cedar, western he species (or the cover under the
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, we hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of toombinations of species) listed in the table found in the instructions provide more than 30% of to canopy?  Yes - Category I Bog Wetland  No - Not a Bog Wetland	stern red cedar, western he species (or he cover under the  Result:
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, we hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of toombinations of species) listed in the table found in the instructions provide more than 30% of toombinations of species) listed in the table found in the instructions provide more than 30% of toombinations of species) listed in the table found in the instructions provide more than 30% of toombinations of species) listed in the table found in the instructions provide more than 30% of toombinations of species) listed in the table found in the instructions provide more than 30% of toombinations of species) listed in the table found in the instructions provide more than 30% of toombinations of species) listed in the table found in the instructions provide more than 30% of toombinations of species) listed in the table found in the instructions provide more than 30% of toombinations of species are species as a species of the speci	stern red cedar, western he species (or he cover under the  Result:
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, we hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of t combinations of species) listed in the table found in the instructions provide more than 30% of t canopy?  Yes - Category I Bog Wetland No - Not a Bog Wetland  SC 4.0 Forested Wetlands  SC 4.1 Does the wetland have at least 1 contiguous acre of forest that meets one of the following the following series of the followin	stern red cedar, western he species (or he cover under the  Result:
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, we hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of t combinations of species) listed in the table found in the instructions provide more than 30% of t canopy?  Yes - Category I Bog Wetland No - Not a Bog Wetland  SC 4.0 Forested Wetlands  SC 4.1 Does the wetland have at least 1 contiguous acre of forest that meets one of the following Old-growth forests	stern red cedar, western he species (or he cover under the  Result:
SC 3.4 Is an area with peats or mucks forested (>30% cover) with Sitka spruce, subalpine fir, we hemlock, lodgepole pine, quaking aspen, Engelmann Spruce, or western white pine AND any of t combinations of species) listed in the table found in the instructions provide more than 30% of t canopy?  Yes - Category I Bog Wetland No - Not a Bog Wetland  SC 4.0 Forested Wetlands  SC 4.1 Does the wetland have at least 1 contiguous acre of forest that meets one of the following Old-growth forests	stern red cedar, western he species (or he cover under the  Result:

Wetland

Wetland name or number: 12

No - Not a Forested Wetland

#### SC 5.0 Wetlands in Coastal Lagoons

SC 5.1 Coastal Lagoons: Does the wetland meet all of the following criteria of a wetland in a coal.  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 rocks	stal lagoon?
The depression 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 open water area (measured	ı
near the bottom)	
The lagoon retains some of its surface water at low tide during spring tides	
Yes - Go to SC 5.2	
No - Not a Coastal Lagoon Wetland	Result: Not a Coastal  Lagoon Wetland
SC 5.2 Does the wetland meet all of the following three conditions?	
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).	
At least 75% of the landward edge of the wetland has a 100ft buffer of shrub, forest, or un-	
grazed or un-mowed grassland.	
the wetland is larger than 0.10ac (4350 sqft)	
Yes - Category I Coastal Lagoon	
No - Category II Coastal Lagoon	Result:
SC 6.0 Interdunal Wetlands	
SC 6.1 Is the wetland west of the 1889 line (also called the Western Boundary of Upland Owners	hip WBUO)?
Yes - Go to SC 6.2	
No - Not an Interdunal Wetland	Result: Not an Interdunal Wetland
SC 6.2 Is the wetland 1ac or larger in size, or a mosaic that is 1ac or larger in size?	
Wetland is larger than 1ac in size - Go to SC 6.3	
Wetland is a mosaic larger than 1ac is size - Category II Interdunal Wetland	
No - Go to SC 6.4	Result:
SC 6.3 Does the wetland score 8 or 9 points for the habitat functions?	
Yes - Category I Interdunal Wetland	
No - Category II Interdunal Wetland	Result:
SC 6.4 Is the wetland unit between 0.1ac and 1ac, or in a mosaic of wetlands that is between 0.1	ac and 1ac in size?
Yes - Category III Interdunal Wetland	
No - Category IV Interdunal Wetland	Result:
• ,	

Category of wetland based on Special Characteristics

If you answered No for all types, enter "Not Applicable" on Summary Form

Final Category: Not

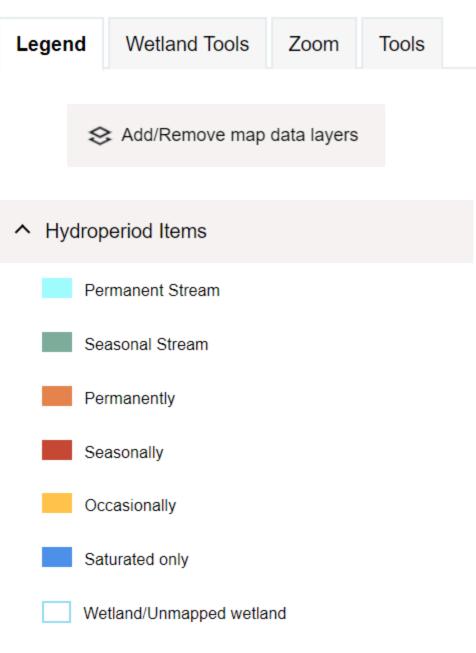
**Applicable** 

Legend Wetland Tools Zoom Tools Add/Remove map data layers ↑ Cowardin Plant Class Items **Cowardin Classes** Forested Scrub-shrub Emergent Aquatic bed Open water

Wetland/Unmapped wetland

Date: 05/24/2024 **Project: Bremerton Airport** Wetland: **12** (Depressional) Find address or place Bing Imagery ▼ Bremerton National Airport 200 m 600 ft © 2024 Microsoft Corporation, © 2024 Maxar, ©CNES (2024) Distribution Airbus DS, © 2024 TomTom Powered by Esri

About



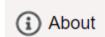


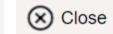
Legend Wetland Tools Zoom Tools

Project: **Bremerton Airport** 

Wetland: 12 (Depressional)

Date: 05/24/2024





Add/Remove map data layers

↑ Location of Outlet Items

Wetland

Outlet location



Wetland Tools Zoom Tools Legend ⇔ Add/Remove map data layers ↑ Land Use Items Generates excessive runoff Generates pollutants Generates excessive runoff and pollutants Upland within 150' wetland buffer Wetland

Wetland buffer (150')



**Project: Bremerton Airport** Wetland Tools Legend Zoom Tools

Wetland: 12 (Depressional)

Date: 05/24/2024





Add/Remove map data layers

↑ Contributing Basin Items

Wetland

Contributing basin



