

CRITICAL AREAS REPORT

August 14, 2020 (Revised February 24, 2021)



Oslo Bay Apartments
Poulsbo, WA

Prepared for

Edward Rose and Sons PO Box 2011 Bloomfield Hills, MI 48303 (248) 686-5500

Prepared by

Ecological Land Services

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SIGNATURE PAGE

The information and data in this report were compiled and prepared under the supervision and direction of the undersigned.

Joanne Bartlett, SPWS

Senior Biologist

INTRODUCTION

Ecological Land Services, Inc. (ELS) was contracted by Edward Rose and Sons (Rose) to update the wetland delineation and report prepared for the Oslo Bay Apartments project on Vetter Road in Poulsbo, Washington (Figure 2). The project site is located in the northwest corner of the intersection of State Route 305 and State Route 307 (Bond Road) in Sections 10 and 11 in Township 26 N, Range 1 East of the Willamette Meridian (Figure 1). This report summarizes findings of the wetland delineation according to the *Poulsbo Municipal Code (PMC)*, *Chapter 16.20.200 Wetlands* for delineation methodology, wetland categorization, and required buffer widths and *16.20.300 Fish and Wildlife Habitat Conservation Areas* for stream typing and buffer standards.

METHODOLOGY

The wetland delineation followed the Routine Determination Method according to the U.S. Army Corps of Engineers, *Wetland 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* (U.S. Army Engineer Research and Development Center, 2010).

The Routine Determination Method examines three parameters—vegetation, soils, and hydrology—to determine if wetlands exist in a given area. Hydrology is critical in determining what is wetland but is often difficult to assess because hydrologic conditions can change periodically (hourly, daily, or seasonally). Consequently, it is necessary to determine if hydrophytic vegetation and hydric soils are present, which would indicate that water is present for long enough duration to support a wetland plant community. By definition, wetlands are those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands are regulated as "Waters of the United States" by the U.S. Army Corps of Engineers (USACE), as "Waters of the State" by the Washington Department of Ecology (Ecology), and locally by the City of Poulsbo.

The wetlands on this property were delineated by Wiltermood Associates, Inc. (Wiltermood) between July 2006 and February 2011. A wetland analysis report was prepared in December 2010 and revised in April 2011 (Wiltermood 2011), which described the wetlands, the categories, and buffers in detail. ELS was contracted to update the report to current methodologies in June 2016 because it had been more than 5 years since the wetlands were last delineated. The report update included a field visit to verify the 2010 and 2011 delineations. The field visit revealed that flags remain around each wetland and they reflect the current wetland boundaries. Few flags were found around Wetland C, so the boundary was re-delineated during the June 2016 site visit and each was located using a Trimble handheld Global Positioning System (GPS) unit. The comparison of the GPS points and the original survey indicate the boundary of Wetland C remains as delineated in 2011 (Figure 2).

There have been no changes to the forested condition of the wetlands and the properties in general, so data was not collected during the June 2016 site visit. Therefore, the data forms prepared by Wiltermood were updated for inclusion in this report. The Wiltermood delineation was conducted

using the Corps of Engineers Supplement to the Wetland Delineation Manual for Western Mountains, Valleys, and Coast Region so the methodology is up to date. To determine the presence or absence of wetlands on these properties, the Wiltermood biologists (primarily Joanne Bartlett) collected data on vegetation, hydrology, and soils. During the 2016 site visit, the boundaries of the three onsite wetlands were identified and verified as accurate and new flags were hung only along the boundary of Wetland C. The wetland boundaries were delineated using consecutively numbered fluorescent flagging labeled "WETLAND DELINEATION". Wetland boundaries were determined through breaks in topography, changes in vegetation, and evidence of hydrology. Vegetation, hydrology, and soil data was collected by Wiltermood at thirty test plots to verify the wetland boundary delineations and document onsite conditions (Appendix A). The wetland boundary and test plot flags were surveyed following the final delineation in 2011 by Team 4 Engineering and are shown on the site map (Figure 2).

2020 Update

The conclusions in this report are based on extensive coordination with the City, the Washington Department of Fish and Wildlife (WDFW), and the Suquamish Tribe. On April 27, 2020, ELS submitted a revised critical areas analysis to respond to comments from Grette Associates, the City's peer reviewer. Grette largely concurred with ELS's wetland categorizations but noted changed conditions associated with the stream located along the western edge of the project site. On June 17, 2020, ELS submitted an updated technical memorandum to respond to Grette's remaining comments on the wetland categorizations. That memorandum supported ELS's conclusions that Wetlands A, B, C were Category IV wetlands. In a July 1, 2020 comment letter, Grette concurred with the revised ratings for Wetland B and C as Category IV. However, Grette determined that Wetland A should be rated as a Category III based upon riparian areas associated with Dogfish Creek. Grette noted that Nam Siu from WDFW and Alison O'Sullivan from the Suquamish Tribe were consulted and they both concurred with the riparian area determination. Accordingly, this report has been updated to reflect a Category III rating for Wetland A.

On June 3, ELS and applicant representatives, WDFW, City staff, and Grette met on site to determine the extent of the unnamed stream. It was determined that the stream now extends to the outlet of the culvert beneath the Kitsap Transit Station, as described in the attached letter from Nam Siu of WDFW dated June 5, 2020 (Appendix C). After the June 2020 site meeting, ELS biologists revisited the stream to identify the ordinary high-water mark (OHWM) and to determine the break in stream type based on the June 5, 2020 letter from Nam Siu of WDFW. The northern half of the stream meets the criteria for a Type Ns 1 water because it connects downstream with a Type F2 stream. The Type Ns 1 designation is based on the lack of water flow through portions of the sometimes widened, flat channel and the Type F2 designation begins where water flow is perennial and consistent (Figure 2). The change in stream type occurs on the Red Dragon property, which separates the western sections of the project site.

PROJECT SITE DESCRIPTION

The project site is composed of upland forest on undulating to steeply sloping terrain. The steepest slope is in the southeast corner down to Dogfish Creek. The parcels are all currently undeveloped but a historic homesite was located on the western parcel (Resultant Parcel V; Figure 2). The home has been removed and the only indication that a home was on this property is the driveway

from State Route (SR) 305. Dogfish Creek crosses the very southeast corner of the project site through an open section between the culverts under SR 307 and SR 305.

The 2011 Wiltermood wetland delineation revealed three wetlands on the project site. Wetland A is located in the southeast corner of the project site and is on sloping terrain that ends at Dogfish Creek. It is a forested mosaic system that provides a source of hydrology to Dogfish Creek but does not receive waters from the stream during flood events (Photoplates 1 through 5, 7, and 9). There is a large upland island (Photoplates 6 and 7) situated near the east end of the wetland that is surrounded by the mosaic wetland system. Wetland B is a sloping system that lies on ravine slopes on both sides of the unnamed stream located at the southwest corner of the project site (Photoplates 7, 8, and 10). The onsite wetland ends at the culvert under State Route 305, which is located along the south edge of the project site. The stream continues south and eventually drains into Dogfish Creek just before it enters Liberty Bay. Wetland C is a sloping scrub/shrub system that lies along the east edge of the project site and is just upslope of SR 307 (Photoplate 8). It drains into the ditch along SR 307, which conveys water downslope and south toward Dogfish Creek (Figure 2).

VEGETATION

The June 2016 site visit revealed that the wetlands remain in the forested conditions as described presented in the 2011 report (Wiltermood 2011). The forested community of Wetland A was dominated by western red cedar (*Thuja plicata*, FAC) and red alder (*Alnus rubra*, FAC) in the tree layer. The shrub layer was sparse in much of the wetland with low percentages of salmonberry (*Rubus spectabilis*, FAC) throughout. The herbaceous layer was moderately dense and was dominated by lady fern (*Athyrium filix-femina*, FAC), slough sedge (*Carex obnupta*, OBL), foam flower (*Tiarella trifoliata*, FAC), skunk cabbage (*Lysichiton americanum*, OBL), deer fern (*Blechnum spicant*, FAC), trailing blackberry (*Rubus ursinus*, FACU), and horsetail (*Equisetum arvense*, FAC).

Wetland B was forested and dominated western red cedar, with a sparse shrub layer of salmonberry and red elderberry (*Sambucus racemosa*, FACU). The herbaceous layer was dominated by skunk cabbage and lady fern with lower percentages of horsetail, youth on age (*Tolmeia. menziesii*, FAC), and sword fern (*Polystichum munitum*, FACU).

Wetland C was composed of forested and scrub/shrub vegetation communities dominated by red alder in the forest canopy, salmonberry in the shrub communities, and reed canarygrass (*Phalaris arundinacea*, FACW) in the understory of the forest and shrub communities. Himalayan blackberry (*Rubus armeniacus*, FAC) is present in some areas.

The upland communities on the project site were dominated primarily by coniferous forest with sparse shrub and sometimes dense herbaceous layers. There are areas of deciduous trees primarily on the east and west sides with dense shrub and sparse herbaceous layers. The upland vegetation includes Douglas fir (*Pseudotsuga menziesii*, FACU), western red cedar, red alder, bigleaf maple (*Acer macrophyllum*, FACU), cascara (*Frangula purshiana*, FAC), bitter cherry (*Prunus emarginata*, FACU), and western hemlock (*Tsuga heterophylla*, FACU) in the tree canopy. The shrub layer is mostly sparse and includes varying percentages of salmonberry, Indian plum (*Oemleria cerasiformis*, FACU), evergreen huckleberry (*Vaccinium ovatum*, FACU), hazelnut

(Corylus cornuta, FACU), red huckleberry (Vaccinium parvifolium, FACU), salal (Gaultheria shallon, FACU), pacific rhododendron (Rhododendron macrophyllum, UPL), ocean spray (Holodiscus discolor, FACU), Himalayan blackberry, red elderberry (Sambucus racemosa, FACU), Oregon grape (Mahonia nervosa, FACU), and trailing blackberry (R. ursinus) FACU.

The dominant vegetation found onsite is recorded on the attached wetland determination data forms (Appendix A). The indicator status, following the common and scientific names, indicates how likely a species is to be found in wetlands. Listed from most likely to least likely to be found in wetlands, the indicator status categories are:

- **OBL** (obligate wetland) Almost always occur in wetlands.
- **FACW** (facultative wetland) Usually occur in wetlands, but may occur in non-wetlands.
- **FAC** (facultative) Occur in wetlands and non-wetlands.
- **FACU** (facultative upland) Usually occur in non-wetlands, but may occur in wetlands.
- **UPL** (obligate upland) Almost never occur in wetlands.
- **NI** (no indicator) Status not yet determined.

Soils

As referenced on the U.S.D.A. Natural Resources Conservation Service (NRCS 2015) website, the soils from west to east across this property include Poulsbo gravelly sandy loam, 0-6 percent slopes (39), Poulsbo gravelly sandy loam, 6 to 15 percent slopes (40), and Poulsbo gravelly sandy loam, 15-30 percent slopes (41), Norma fine sandy loam (37) at the southeast corner and along the west edge, and Bellingham silty clay loam (6) in a small area along the east edge (Figure 3). Poulsbo soils are not classified as hydric, but Norma and Bellingham soils are classified as hydric (NRCS 2015). The identified and delineated wetland areas are located in areas where hydric soils are mapped. Areas mapped as hydric soils do not necessarily mean that an area is or is not a wetland—hydrology, hydrophytic vegetation, and hydric soils must all be present to classify an area as a wetland.

The soils evaluated in Wetland A were composed of peat in some locations and loam to gravelly sandy loam in others with black (10YR 2/2 to 10YR 3/2) soil matrix colors found in the Wetland A test plots. Redoximorphic concentrations were visible in the gravelly sandy loam that have reddish brown (10YR 4/6) colors and a sulfidic odor was emitted from the soil hole with the peat soil profile. The soils evaluated in Wetlands B and C are identical consisting of sandy loam with a black (10YR 2/1) soil matrix chroma. The subsurface layer of these profiles was not reached within 16 inches and because these profiles appear to represent a dark surface layer, they have characteristics for hydric soil indicator A12 (thick dark surface). The soil profiles in Wetland A meet hydric soil indicators A1-Histosol and A2-Hydrogen Sulfide and A11 for a depleted matrix below a dark surface. The soil profiles in Wetlands B and C most closely match the description for hydric soil indicator A12 because of the dark matrix chroma in the surface that extends to a depth of 16 inches. A soil layer exhibiting a depleted matrix chroma is presumed present lower in these profiles.

The upland soils evaluated across the project site were composed of loam to gravelly sandy loam with dark brown to bright yellowish-orange (7.5YR 4/4 and 10YR 2/2 to 10YR 5/4) matrix colors. Redoximorphic features were not observed in any of the upland soil profiles. The upland soil

profiles have bright red to orange matrix chromas so do not have characteristics for any of the hydric soil indicators.

Hydrology

Each of the wetlands exhibited shallow water tables and saturation to within 12 inches of the soil surface during the previous delineations. Similar hydrologic conditions were observed during the June 2016 verification site visit. The source of hydrology within these wetlands is groundwater discharge from the slopes with additional inputs from direct precipitation. Water flows down the sloping terrain of each wetland and either flows into a stream (Wetlands A and B) or into a roadside ditch (Wetland C). Additionally, the ditch along 305 enters the southern portion of Wetland A but provides minimal hydrology to the overall wetland. None of these wetland areas are influenced by floodwaters from the streams or ditch because they are situated upslope and outside the immediate flood zone. Hydrology was not present in the upland areas and there was no evidence of wetland hydrology.

NATIONAL WETLANDS INVENTORY

The National Wetlands Inventory (NWI) map indicates the presence of wetland across the west edge of the property, which corresponds with the location of Wetland B (Figure 4). The areas identified as Wetlands A and C are not shown in the NWI map. ELS biologists partially agree with the mapping of the wetlands because Wetland B is in the mapped location, however, the map shows a much larger wetland than was delineated in 2011 and does not show Wetlands A or C. The NWI maps should be used with discretion because they are used to gather general wetland information about a regional area and therefore are limited in accuracy for smaller areas because of their large scale.

KITSAP COUNTY CRITICAL AREAS

The Kitsap County Critical Areas map (KC 2015) identifies wetland along the west edge and at the southeast corner of the project site (Figure 5). The map shows the area as hydric soil per the NRCS and wetland per the NWI where the onsite wetlands were identified and delineated. ELS biologists agree with the mapping of hydric soils except in the area of Wetland B because the maps show much greater wetland area than was identified during the boundary delineations.

CONCLUSIONS

WETLAND CATEGORIZATION

Three wetlands were identified and delineated on the Oslo Bay Apartments properties and each are composed of a slope hydrogeomorphic (HGM) class (Table 1). The wetlands were rated according to *Washington State Wetlands Rating System for Western Washington, 2014 Update* (Rating System) (Hruby 2014). The categories of the onsite wetlands are based on the scores for water quality, hydrologic, and habitat functions (Appendix B). Wetlands A and B were rated as Category IV systems in the original report, but peer review in July 2020 determined that Wetland A meets the Category III criteria. Wetlands B and C remain Category IV systems. Figures 6 through 10 were used to determine the category of each wetland.

Table 1: Wetland Categories

Wetland	HGM Class	Vegetation Class	2014 Wetland Rating System				Wetland Category
			Water Quality	Hydrologic	Habitat	Total	
A	Slope	Forested	5	5	6	16	III
					(moderate)		
В	Slope	Forested	5	5	4	14	IV
C	Slope	Forested	6	5	4	15	IV

WATER TYPES FOR ONSITE STREAMS

The *PMC Section 16.20.305 Fish and Wildlife Habitat Conservation Critical Areas* (FWHCA) has established the water types for Dogfish Creek that includes all five forks. The section of Dogfish Creek on this property is identified as the Main Stem, which originates within Big Valley several miles to the north. The main stem meets the criteria for a Type F1 water because it has current use by salmonids.

The western stream is located along the west edge of the Oslo Bay Apartments project and extends north to the Kitsap Transit Center. Originally the stream was mapped only where it was observed within Wetland B and a short distance north, which was identified as a Type F2 water. After a site review and determination by Nam Siu of Washington Department of Fish and Wildlife (WDFW), the stream was extended north as shown on the City of Poulsbo maps (Appendix C). The stream was further determined to have different types based on the conditions observed during the site review. The Type F2 stream was extended further north, and it now ends on the Red Dragon property that separates the western sections of this project (Figure 2). The remainder of the western stream was determined to be a Type Ns because much of the channel is wide and swale like in some sections with shallow surface water (Photoplate 11). It connects with a Type F water downstream so is considered a Type Ns 1 (Photoplates 11 and 12).

CRITICAL AREA REGULATIONS

The *PMC 16.20.230.B* specifies buffers based on wetland category, scores for habitat functions on the rating form, and the intensity of the proposed land use (Table 2). Wetland A is now rated a Category III wetland with 6 points for habitat, which is in the moderate range for habitat functions. The western drainage is now considered a regulated stream with Type Ns 1 and Type F2 sections. A 15-foot building and impervious surface setback is also specified from the edge of wetland buffers.

Table 2. Critical Area Buffer Requirements

Critical Area	Cowardin Class	Wetland Category or Water Type	Habitat Score	Critical Area Buffer Widths ^{1, 2}
Wetland A	PFOB	III	6 (Moderate)	150 feet
Wetland B	PFOB	IV	5 (Low)	50 feet
Wetland C	PFOSSB	IV	5	50 feet
Dogfish Creek		Type F1 (Salmonids)		200 feet
Western _ Stream	North end	Type Ns 1		75 feet
	South end	Type F2 (Non-salmonids)		150 feet

¹PMC 16.20.230.B (Table 16.20.230.B) High Intensity Land Use Widths

Wetland buffer reductions are allowed per the *PMC* by averaging the buffer width, which involves subtracting an area of buffer by up to 25 percent and adding the same area in another location so that the buffer averages the standard width. Administrative reductions of 25 percent are also permitted and require mitigation to compensate for the loss of buffer function. Reductions to stream buffers of up to 25 percent are permitted when recommended by a habitat management plan that is reviewed by the Washington Department of Fish and Wildlife and the Suquamish Tribe and both agencies concur with the findings. Buffer reductions of both critical area types typically require mitigation to compensate for the loss of buffer acreage. Buffer averaging has built in mitigation because it requires an equal exchange of buffer to average the required buffer widths. Reductions to wetland and stream buffers, if any, will be described in a separate report.

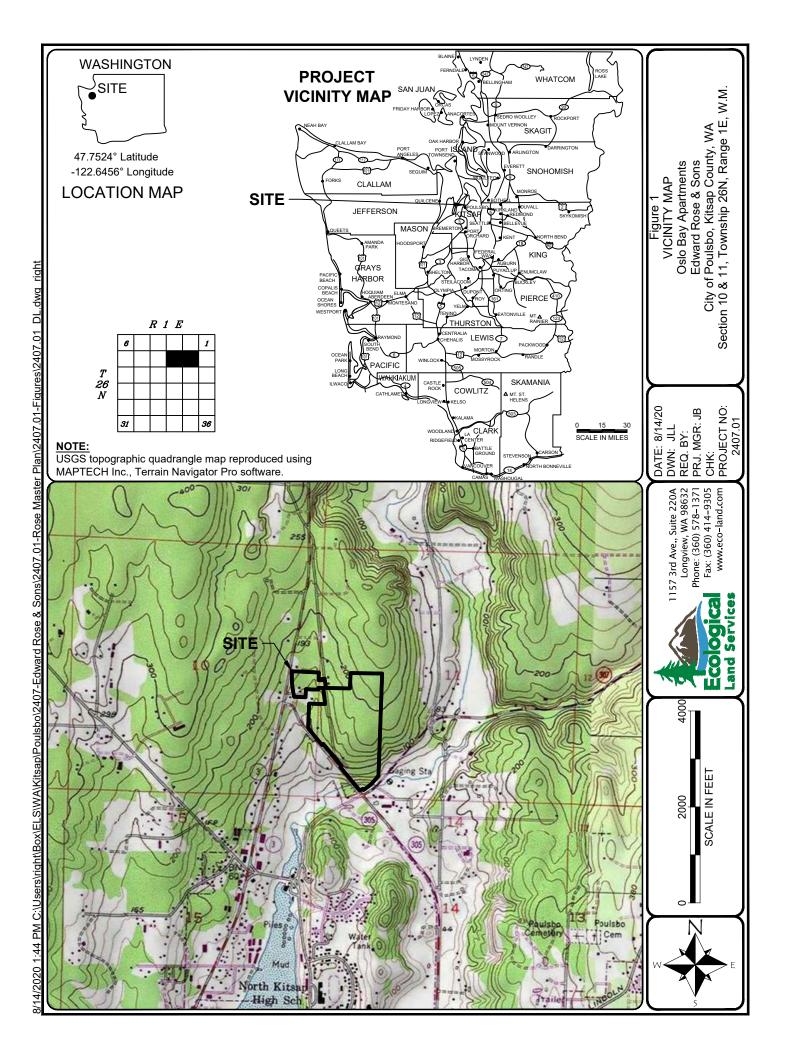
LIMITATIONS

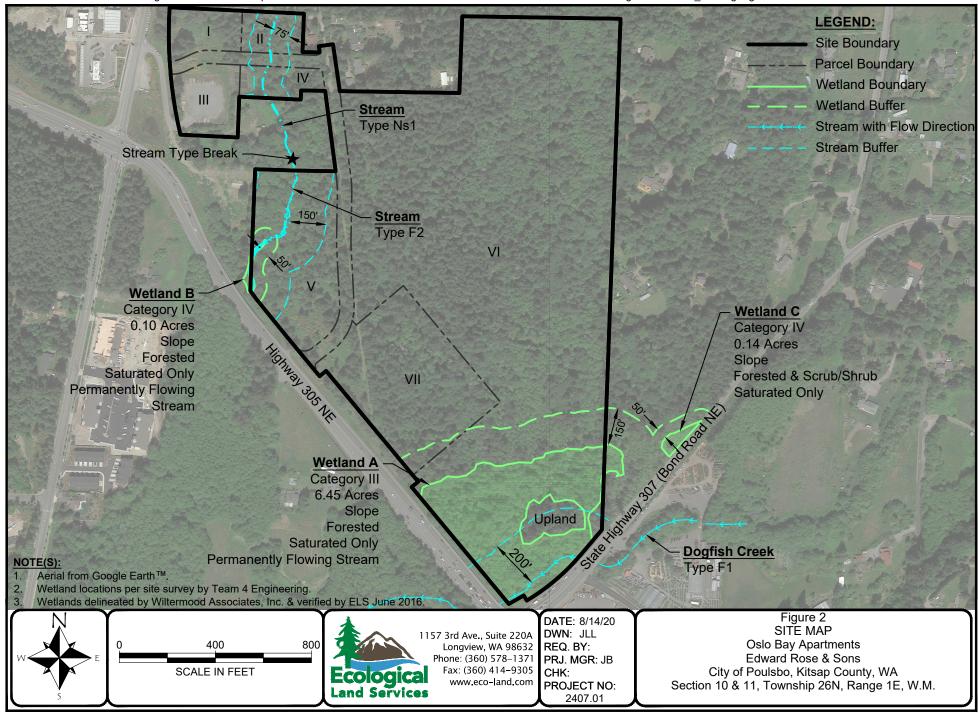
ELS bases this report's determinations on standard scientific methodology and best professional judgment. In our opinion, local, state, and federal regulatory agencies should agree with our determinations. However, the information contained in this report should be considered preliminary and used at your own risk until it has been approved in writing by the appropriate regulatory agencies. ELS is not responsible for the impacts of any changes in environmental standards, practices, or regulations after the date of this report.

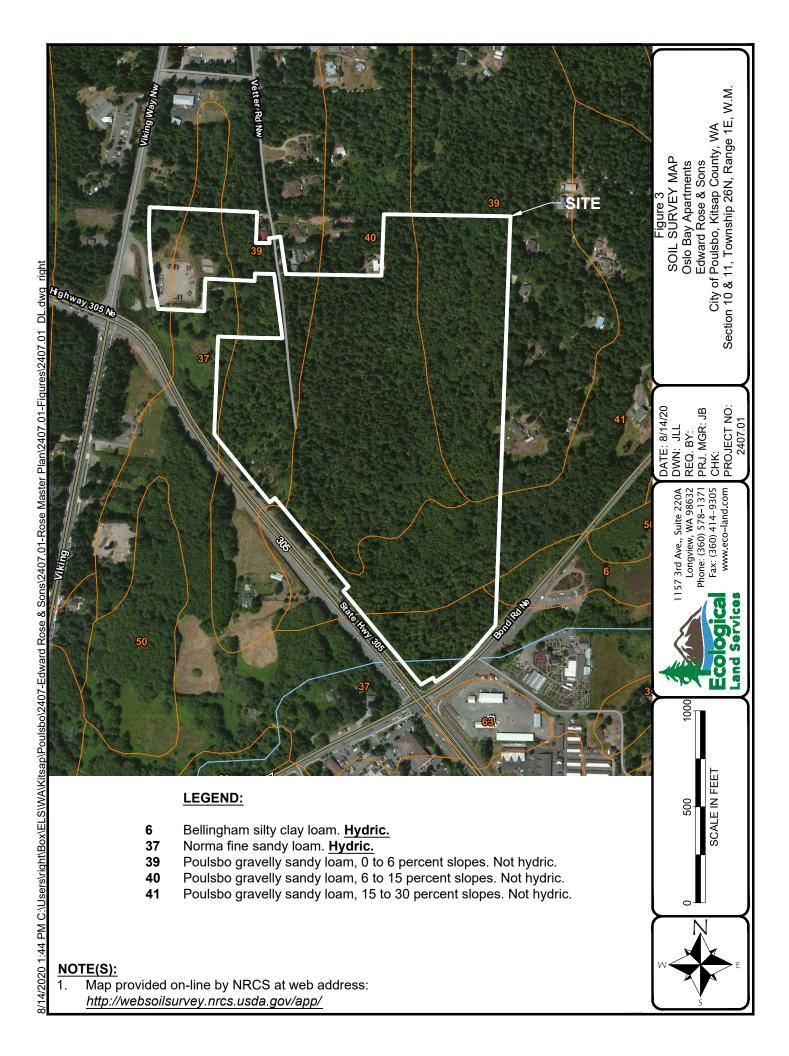
²PMC 16.20.315 (Table 16.20.315)-Standard Buffer Widths

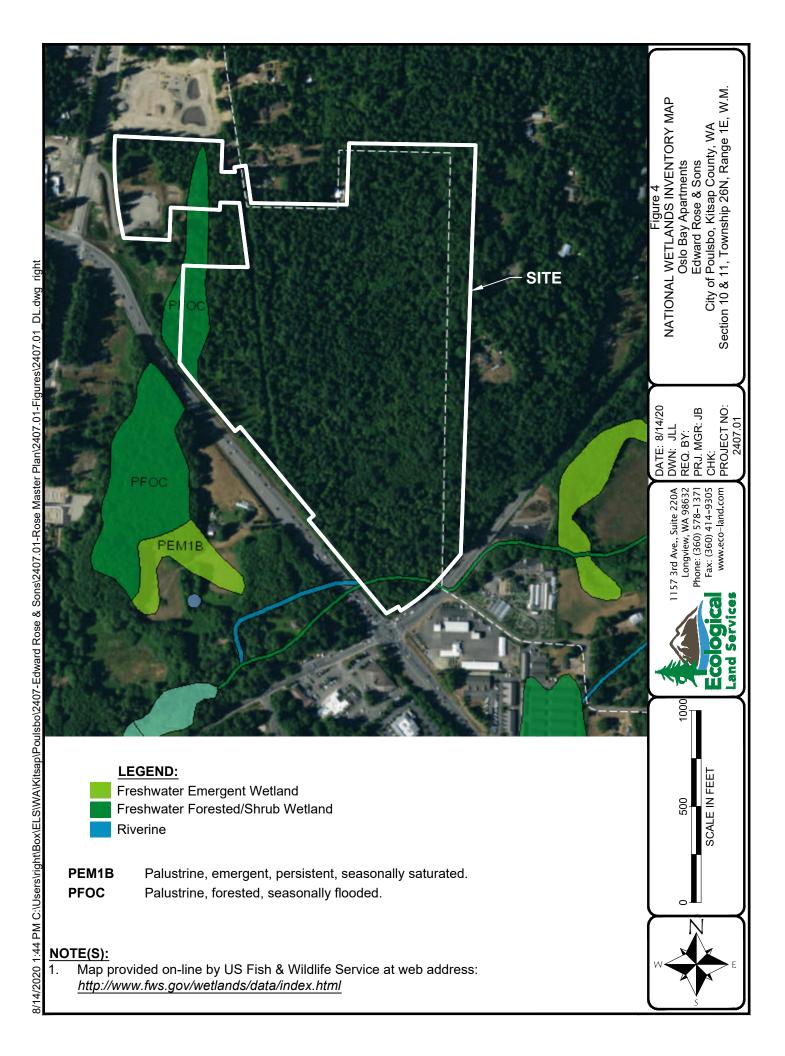
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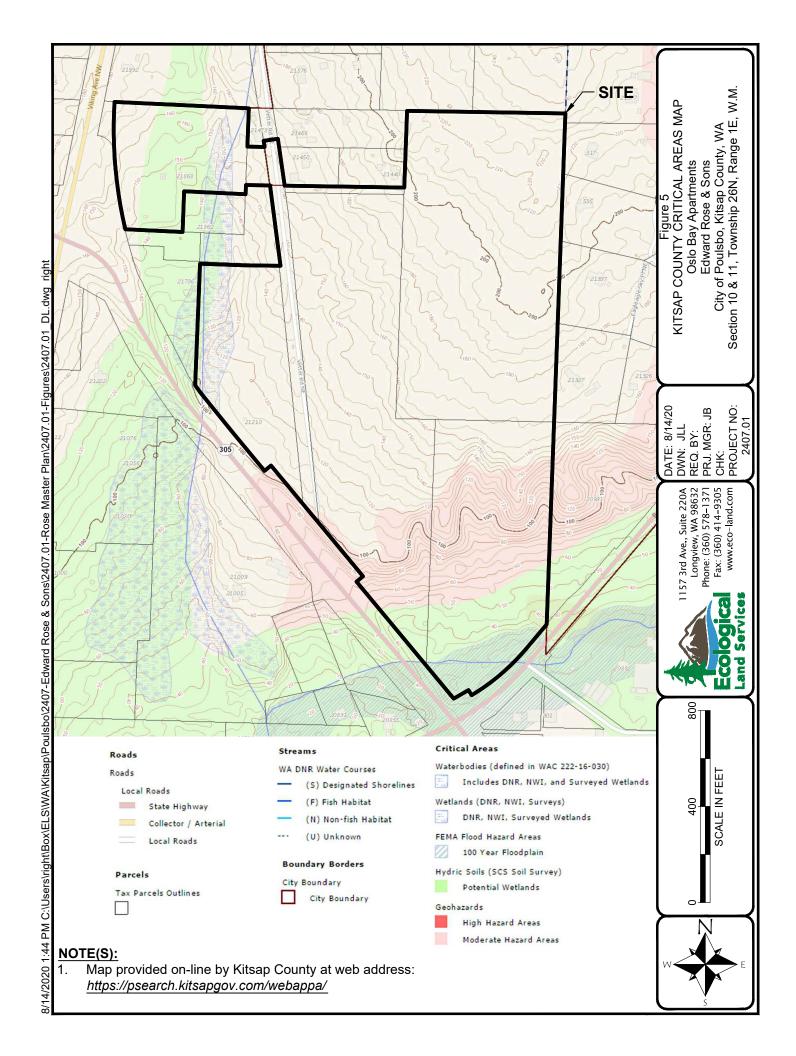
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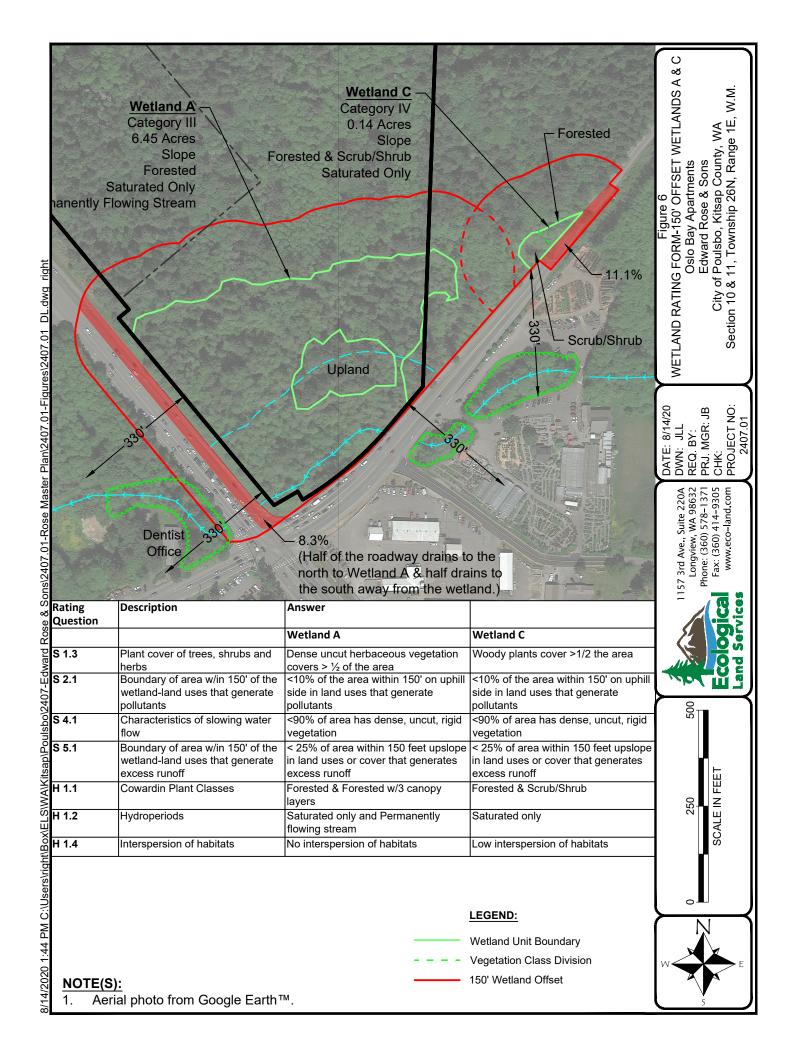


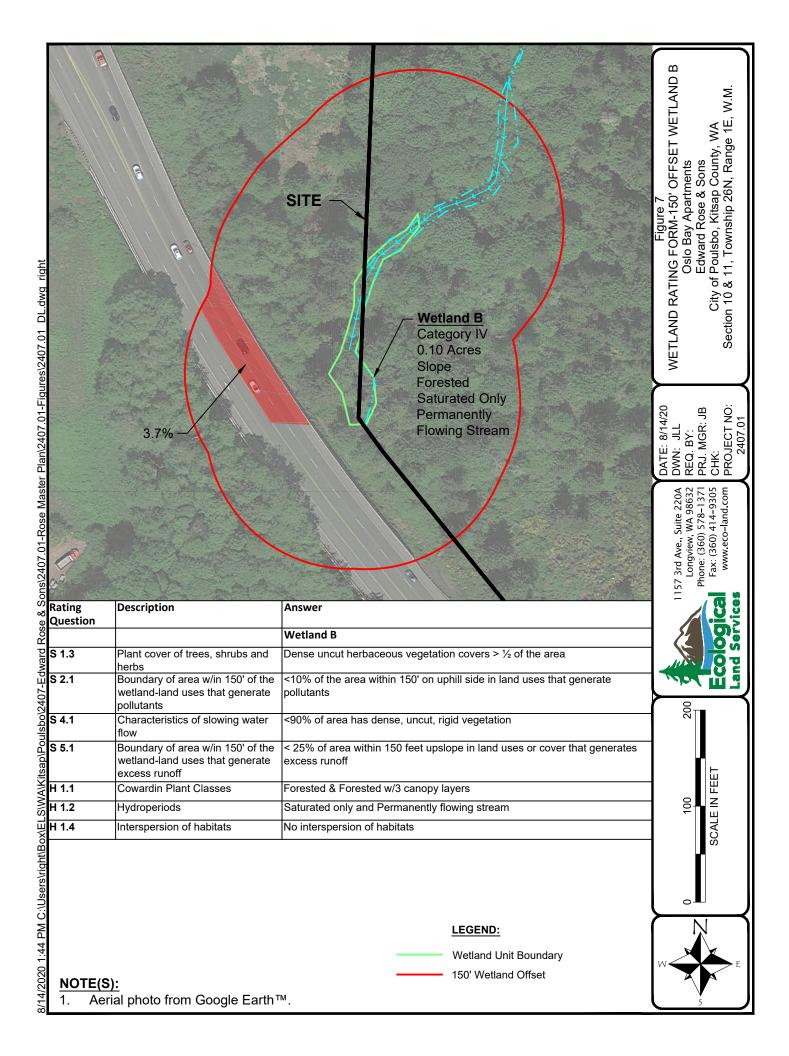


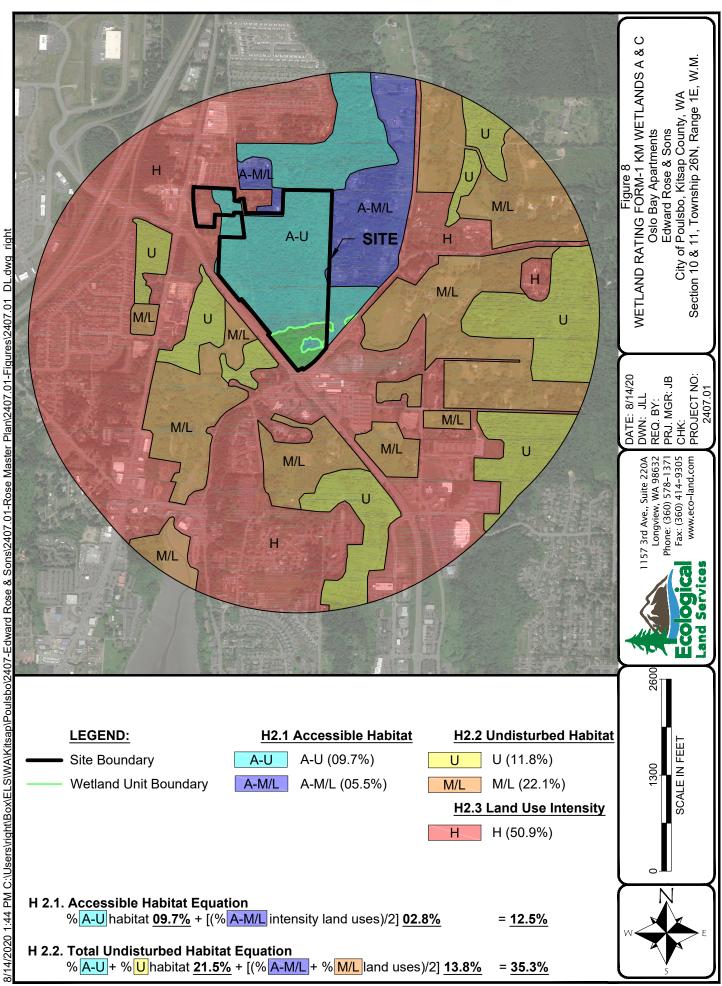


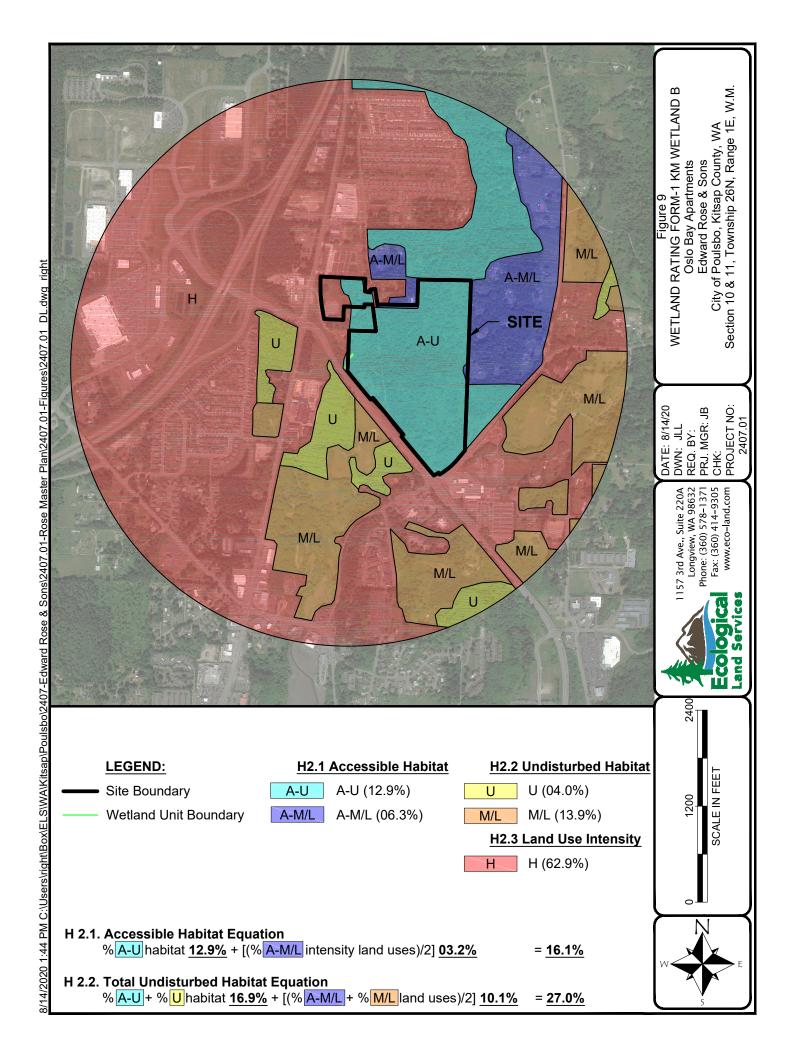












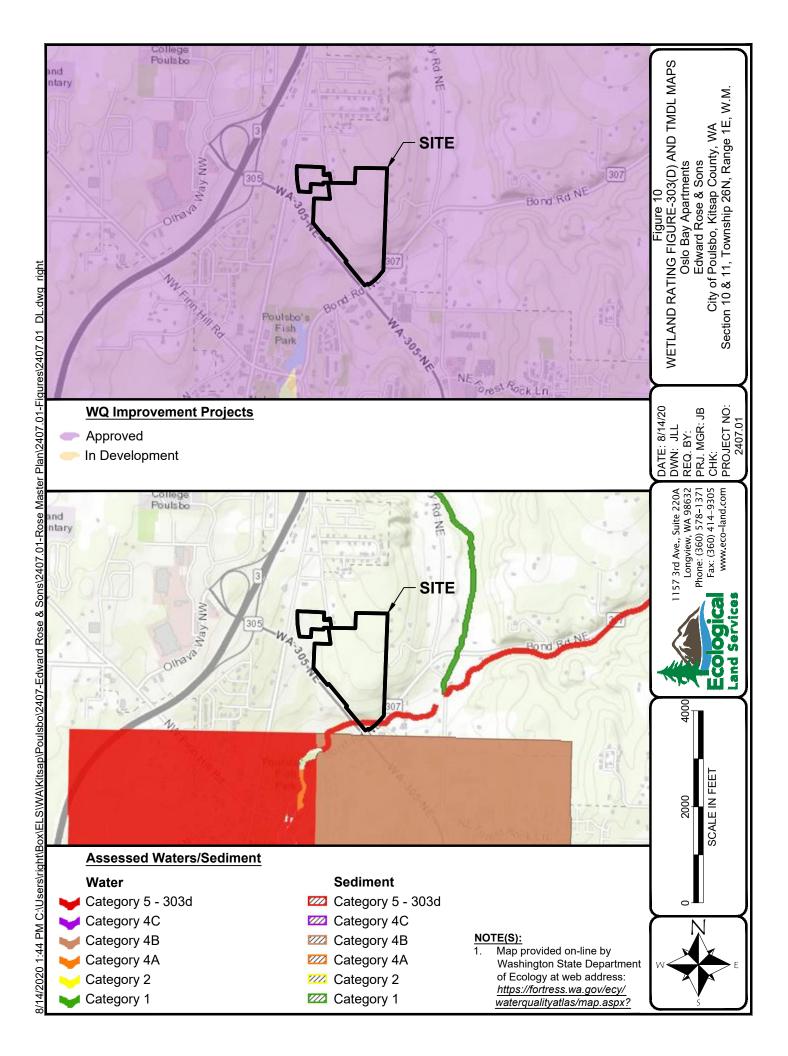




Photo 1 was taken during the 2011 delineation site visit by Wiltermood. It is taken from WB flag A-2 and looks northeasterly across the south end of Wetland A.



Photo 2 was taken from the same location as Photo 1 and looks easterly across Wetland A.



Photo 3 was taken from the same location as Photos 1 and 2. It looks southerly across Wetland A with WB A-2 featured prominently in this photo.



1157 3rd Ave., Suite 220A Longview, WA 98632 (360) 578-1371 Fax: (360) 414-9305

DATE: 7/7/16 DWN: JB PRJ. MGR JB PROJ.#: 2407.01 Photoplate 1
Project Name: Edward Rose
Master Plan
Client: Edward Rose and Sons
Kitsap County, Washington



Photo 4 was taken during the 2011 delineation site visit by Wiltermood. This photo looks north along the upland slope that lies just west of Wetland A. Test Plot 2-A was conducted in this area to verify the wetland boundary delineation.



Photo 5 was taken from the same location as Photo 4 and looks directly into the area where Test Plot 2-A was conducted. This area is determined to be upland because it lacks positive indicators for all three wetland parameters.



Photo 6 was taken from the same location as Photos 4 and 5. It looks southerly across the upland west of Wetland A toward SR 305, which is visible in the lighted background.



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DATE: 7/7/16 DWN: JB PRJ. MGR JB PROJ.#: 2407.01 Photoplate 2
Project Name: Edward Rose
Master Plan
Client: Edward Rose and Sons
Kitsap County, Washington



Photo 7 was taken during the 2011 delineation site visit by Wiltermood. This photo was taken from near Test Plot 3-A and looks westerly up a dry swale that originates upslope and ends at the wetland boundary.



Photo 8 was taken from the same location as Photo 7 and looks northwesterly past Test Plot 3-A. It shows the slope that runs along the dry swale pictured in Photo 7.



Photo 9 was taken from the wetland boundary between flags WB A-20 and WB A-21. This photo looks westerly up a wider swale that ends at the wetland boundary. This area was determined to be upland because it lacks positive indicators for all three wetland parameters.



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DATE: 7/7/16 DWN: JB PRJ. MGR JB PROJ.#: 2407.01 Photoplate 3
Project Name: Edward Rose
Master Plan
Client: Edward Rose and Sons
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Photo 10 was taken from the same location as Photo 9 (Photoplate 3) between flags A-20 and A-21. It looks southwesterly toward flag A-20. The wetland is on the left side of the photo and upland is to the right.



Photo 11 was taken from the same location as Photos 9 and 10. It shows the area of Test Plot 4-A, which is just upslope and north of WB flag A-22. This area is determined to be upland because it lacks positive indicators for all three wetland parameters.



Photo 12 was taken from the same location as Photos 9, 10, and 11. It looks northeasterly along the wetland boundary as flagged at WB A-21. In this photo, the wetland is to the right and upland is on the left.



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DATE: 7/7/16 DWN: JB PRJ. MGR JB PROJ.#: 2407.01 Photoplate 4
Project Name: Edward Rose
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Kitsap County, Washington



Photo 13 was taken from a point just upslope from Dogfish Creek, which crosses the southeast corner of the project site. This photo looks northeasterly at the forest that lies alongside the stream.



Photo 14 was taken from the same location as Photo 13. It looks easterly across the wetland that lays just upslope of Dogfish Creek. SR 307 appears in the lighted background of this photo.



Photo 15 was taken from the same location as Photos 13 and 14. It looks southerly through the lowest portion of Wetland A.



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DATE: 7/7/16 DWN: JB PRJ. MGR JB PROJ.#: 2407.01 Photoplate 5
Project Name: Edward Rose
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Photo 16 was taken from the north boundary of Wetland A looking toward the upland island that is located in the east half of Wetland A. This photo looks southeasterly into the wetland north of the island.



Photo 17 was taken from the same location as Photo 16. It looks southerly down the slope along a rivulet that has formed in the sloping, seep fed wetland. Wetland boundary flag A-40 is on the tree at the right edge of this photo.



Photo 18 was taken from the edge of the upland island and looks across the northwest west portion.



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Project Name: Edward Rose
Master Plan
Client: Edward Rose and Sons
Kitsap County, Washington



Photo 19 was taken from the same location as Photo 18 and shows the northwestern portion of the upland island within Wetland A. Note the Douglas fir trees growing on the island in the middle background.



Photo 20 was taken from the east boundary of Wetland B and looks southeasterly toward wetland boundary flag B-21, which is on the tree to the left.



Photo 21 was taken from the same location as Photo 20 and looks southerly across Wetland B.



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Photoplate 7



Photo 22 was taken from the same location as Photos 20 and 21 on Photoplate 7. It looks north along the wetland boundary with wetland boundary flag B-20 on the right edge of the photo.



Photo 23 was taken from the west boundary of Wetland C looking northeasterly. It was taken during the June 2016 field visit to verify the wetland boundaries because no photos were included in the 2011 wetland analysis report. This wetland is composed of forested (background) and shrub/shrub communities.



Photo 24 was taken from the same location as Photo 23 and looks easterly across the scrub/shrub portion of Wetland C.



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DATE: 7/7/16 DWN: JB PRJ. MGR JB PROJ.#: 2407.01 Photoplate 8
Project Name: Edward Rose
Master Plan
Client: Edward Rose and Sons
Kitsap County, Washington



Photo 25 was taken from along the western boundary of Wetland A during the June 2016 site visit to verify the delineation. This photo looks north along the boundary with wetland to the right and the steep slope to the left.



Photo 26 was taken from the same location as Photo 25 during the 2016 field visit. It looks southeasterly into the wetland with a wetland boundary flag visible at the bottom of the small tree.



Photo 27 was taken from the same location as Photos 25 and 26 during the 2016 field visit. It looks south along the delineated boundary of Wetland A with wetland to the left and the upland slope to the right.



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DATE: 7/7/16 DWN: JB PRJ. MGR JB PROJ.#: 2407.01 Photoplate 9
Project Name: Edward Rose
Master Plan
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Kitsap County, Washington



Photo 28 was taken from just outside the northern tip of Wetland B during the June 2016 field visit to verify the wetland delineation. It looks upstream and north of the wetland into the drainage that enters the wetland.



Photo 29 was taken from about midway along the eastern boundary of Wetland B and looks upstream along the edge. The flag in the right half is one of the flags that remain in good condition from the earlier delineations.



Photo 30 was taken from the same location as Photo 29 and it looks southeasterly toward the downstream portion of Wetland B. The flag in the center remains from the previous delineation.



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PROJ.#: 2407.01

Photoplate 10
Project Name: Edward Rose
Master Plan
Client: Edward Rose and Sons
Kitsap County, Washington



Photo 31 was taken during the mapping of the stream on June 9, 2020. This photo shows a section of the Type Ns 1 stream in the northern half.



Photo 32 shows another section of the Type Ns 1 stream. This section is relatively flat and with only scattered areas of surface water.



Photo 33 was taken near the transition from the Type Ns 1 section to Type F2 section. This photo looks north at the southern end of the Type Ns 1 section.



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Fax: (360) 414-9305

DATE: 8/14/20 DWN: JB PRJ. MGR JB PROJ.#: 2407.01

Photoplate 11 Project Name: Edward Rose Master Plan Client: Edward Rose and Sons Kitsap County, Washington



Photo 34 was taken from the same location as Photo 33 and looks southerly at the start of the Type F2 section of the western stream. The transition was roughly near the middle of the stream run and the designation was made where the stream is more channelized and contained water in June 2020.



Photo 35 shows another section of the Type F2 stream. The flags represent the OHWM on each side with most water flowing on the right side. The pool in the right background occurs just downstream of the start of the Type F2 stream segment.



Photo 36 shows another section of the Type F2 stream. The channel width in this location is formed mostly by the topography on the upland slopes.



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DATE: 8/14/20 DWN: JB PRJ. MGR JB PROJ.#: 2407.01 Photoplate 12
Project Name: Edward Rose
Master Plan
Client: Edward Rose and Sons
Kitsap County, Washington

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

Applicant/Owner: Edward Rose and Sons State: WA Sampling Point: TP 1-A Investigator(s): J. Bartlett Section, Township, Range: \$10.8.11, T.26 N. R.1E. Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): sloping Slope (%): 5% Subregion (LRR): MLRA 2 Lat: Long: Datum: Soil Map Unit Name: 41 Poulsbo gravelly sandy loam, 15-30% slopes NWI classification: PFOB Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.) Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No Wetland Hydrology Present? Yes No Is the Sampled Area within a Wetland? Yes No Wetland A where it begins just north of SR 305 and is west of WB A-3. Wetland A remains as it was delineated in 2010 VEGETATION - Use scientific names of plants. Tree Stratum (Plot size: 30' diameter) Absolute Species? Status Species? Status Species Across All Strata: 5 (B) Absolute Species Across All Strata: 5 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B) Prevalence Index worksheet:	etc.
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): sloping Slope (%): 5% Subregion (LRR): MLRA 2 Lat: Long: Datum: Soil Map Unit Name: 41 Poulsbo gravelly sandy loam, 15-30% slopes Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.) Are Vegetation Soil Are Soll Are Soll Are Soll Are Normal Circumstances" present? Yes No Is the Sampled Area within a Wetland? Yes No Within a Wetland? Yes No Within a Wetland? Yes No Within a Wetland? Wetland A remains as it was delineated in 2010 VEGETATION - Use scientific names of plants. Tree Stratum (Plot size: 30' diameter) Absolute Species? Status Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A) Absolute Species Across All Strata: 5 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100% The Are OBL, FACW, or FAC: 100% The Are OBL, FACW, or FAC: 100% T	etc.
Subregion (LRR): MLRA 2 Lat: Long: Datum: Soil Map Unit Name: 41 Poulsbo gravelly sandy loam, 15-30% slopes NWI classification: PFOB Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.) Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No Wetland A is a sloping system west of Dogfish Creek with a forested community and a saturated hydroperiod. The test plot is located at the south end of Wetland A where it begins just north of SR 305 and is west of WB A-3. Wetland A remains as it was delineated in 2010 VEGETATION – Use scientific names of plants. Tree Stratum (Plot size: 30' diameter) 1. Thuja plicata	etc.
Soil Map Unit Name: 41 Poulsbo gravelly sandy loam, 15-30% slopes Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.) Are Vegetation , Soil , or Hydrology , significantly disturbed? Are "Normal Circumstances" present? Yes No Are Vegetation , Soil , or Hydrology , naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No Wetland A where it begins just north of SR 305 and is west of WB A-3. Wetland A remains as it was delineated in 2010 VEGETATION – Use scientific names of plants. Tree Stratum (Plot size: 30' diameter)	etc.
Soil Map Unit Name: 41 Poulsbo gravelly sandy loam, 15-30% slopes Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.) Are Vegetation , Soil , or Hydrology , significantly disturbed? Are "Normal Circumstances" present? Yes No Are Vegetation , Soil , or Hydrology , naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No Wetland A where it begins just north of SR 305 and is west of WB A-3. Wetland A remains as it was delineated in 2010 VEGETATION – Use scientific names of plants. Tree Stratum (Plot size: 30' diameter)	etc.
Are climatic / hydrologic conditions on the site typical for this time of year? Yes \ No \ (If no, explain in Remarks.) Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes \ No \ Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes \ No \ No \ Wetland Hydrology Present? Yes \ No \ No \ Wetland Hydrology Present? Yes \ No \ No \ Wetland A is a sloping system west of Dogfish Creek with a forested community and a saturated hydroperiod. The test plot is located at the south end of Wetland A where it begins just north of SR 305 and is west of WB A-3. Wetland A remains as it was delineated in 2010 VEGETATION — Use scientific names of plants. Tiee Stratum (Plot size: 30' diameter)	etc.
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes \(\) No _ Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes \(\) No \(\) Is the Sampled Area Within a Wetland? Yes \(\) No \(\) Wetland Hydrology Present? Yes \(\) No \(\) Remarks: Wetland A is a sloping system west of Dogfish Creek with a forested community and a saturated hydroperiod. The test plot is located at the south end of Wetland A where it begins just north of SR 305 and is west of WB A-3. Wetland A remains as it was delineated in 2010 VEGETATION - Use scientific names of plants. Vegetation Present? Yes \(\) No \(\)	
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes \(\triangle \trian	
SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No Wetland Hydrology Present? Yes No Wetland A is a sloping system west of Dogfish Creek with a forested community and a saturated hydroperiod. The test plot is located at the south end of Wetland A where it begins just north of SR 305 and is west of WB A-3. Wetland A remains as it was delineated in 2010 VEGETATION - Use scientific names of plants. Dominant Indicator % Cover Species? Status 1. Thuja plicata 25% yes FAC 2. Thuja plicata 25% yes FAC Total Number of Dominant Species That Are OBL, FACW, or FAC: 5	
Hydrophytic Vegetation Present? Yes ⋈ No ☐ Wetland Hydrology Present? Yes ⋈ No ☐ Within a Wetland? Yes ⋈ No ☐ Wetland A is a sloping system west of Dogfish Creek with a forested community and a saturated hydroperiod. The test plot is located at the south end of Wetland A where it begins just north of SR 305 and is west of WB A-3. Wetland A remains as it was delineated in 2010 VEGETATION — Use scientific names of plants. Absolute	
Hydric Soil Present? Yes ☑ No ☐ within a Wetland? Yes ☑ No ☐ Wetland Hydrology Present? Yes ☑ No ☐ Wetland Hydrology Present? Yes ☑ No ☐ Remarks: Wetland A is a sloping system west of Dogfish Creek with a forested community and a saturated hydroperiod. The test plot is located at the south end of Wetland A where it begins just north of SR 305 and is west of WB A-3. Wetland A remains as it was delineated in 2010 VEGETATION – Use scientific names of plants. Tree Stratum (Plot size: 30' diameter) 1. Thuja plicata 2	
Hydric Soil Present? Yes ☑ No ☐ within a Wetland? Yes ☑ No ☐ Wetland Hydrology Present? Yes ☑ No ☐ Wetland? Yes ☑ No ☐ Remarks: Wetland A is a sloping system west of Dogfish Creek with a forested community and a saturated hydroperiod. The test plot is located at the south end of Wetland A where it begins just north of SR 305 and is west of WB A-3. Wetland A remains as it was delineated in 2010 VEGETATION – Use scientific names of plants. Tree Stratum (Plot size: 30' diameter) Absolute Obminant Indicator Species? Status 25% yes FAC Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A) 1. Thuja plicata 25% yes FAC Total Number of Dominant Species Across All Strata: 5 (B) 4	
Wetland Hydrology Present? Yes No L Remarks: Wetland A is a sloping system west of Dogfish Creek with a forested community and a saturated hydroperiod. The test plot is located at the south end of Wetland A where it begins just north of SR 305 and is west of WB A-3. Wetland A remains as it was delineated in 2010 VEGETATION – Use scientific names of plants. Tree Stratum (Plot size: 30' diameter) 1. Thuja plicata 2	
the south end of Wetland A where it begins just north of SR 305 and is west of WB A-3. Wetland A remains as it was delineated in 2010 VEGETATION – Use scientific names of plants. In the stratum (Plot size: 30' diameter) Absolute Species? Status (Species? Status) Dominant Indicator (Species? Status) Number of Dominant Species (Species Across All Strata: Species (Species Across All Strata: Species Across All Strata: Species Across All Strata: Species (Species Across All Strata: Species Across All S	
VEGETATION – Use scientific names of plants. Tree Stratum (Plot size: 30' diameter) Absolute % Cover Species? Status Yes FAC Dominant Indicator Species? Status That Are OBL, FACW, or FAC: 5 Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A) 2	
Absolute Dominant Indicator Species? Status 1. Thuja plicata	
Absolute Dominant Indicator Species? Status 1. Thuja plicata	
Tree Stratum (Plot size: 30' diameter) % Cover Species? Status Number of Dominant Species 1. Thuja plicata 25% yes FAC That Are OBL, FACW, or FAC: 5 (A) 2	
1. Thuja plicata 25% yes FAC That Are OBL, FACW, or FAC: 5 (A) 2	
2.	
3	
Sapling/Shrub Stratum (Plot size: 30' diameter) 25% = Total Cover That Are OBL, FACW, or FAC: 100% (A/B)	
Sapling/Shrub Stratum (Plot size: 30' diameter) 25% = Total Cover That Are OBL, FACW, or FAC: 100% (A/B)	
1. Rubus spectabilis 5% Yes FAC Prevalence Index worksheet:	3)
2. <u>Sambucus racemosa</u> <u>5%</u> <u>Yes</u> <u>FACU</u> <u>Total % Cover of:</u> <u>Multiply by:</u>	
3 OBL species x 1 =	
4 FACW species x 2 =	
5 FAC species x 3 =	
10%	
Herb Stratum (Plot size: 30 feet)	2١
2. Equisetum arvense 15% Yes FAC	"
3. Rubus ursinus 10% No FACU Prevalence Index = B/A =	
4. Tiarellia trifoliata 10% No FAC Hydrophytic Vegetation Indicators:	
5. <u>Lysichiton americanum</u> <u>5%</u> <u>No</u> <u>OBL</u> Dominance Test is >50%	
6 Prevalence Index is 3.0 ¹	
7 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)	
8	
9 Problematic Hydrophytic Vegetation ¹ (Explain)	
10 Indicators of hydric soil and wetland hydrology must	i
11 be present, unless disturbed or problematic.	
<u>60%</u> = Total Cover <u>Woody Vine Stratum</u> (Plot size:)	
1 Hydrophytic	
Vegetation Vegetation	
= Total Cover Present? Yes 🖂 No 🗌	
% Bare Ground in Herb Stratum	
Remarks: Vegetation community dominated by FAC plant species with OBL species present. Forested mosaic system so a couple of FACU species also present	es:

Profile Desc	cription: (Describe	e to the de	epth needed to do	cument the	indicator	or confirm	n the ab	sence of indicators.)
Depth	Matrix		R	edox Feature				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	<u>Textu</u>	re Remarks
0-9"	10YR 2/2	100%					peat	histic epipedon
9-16"	10YR 41	100%					fisalo	
								· ·
-								
·	•							
								·
	-							· · · · · · · · · · · · · · · · · · ·
·	•							
	oncentration, D=De					ed Sand Gr		² Location: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Appli	cable to a	II LRRs, unless of	herwise not	ed.)		lı	ndicators for Problematic Hydric Soils ³ :
☐ Histosol	, ,		☐ Sandy Redo					2 cm Muck (A10)
-	pipedon (A2)		☐ Stripped Ma	, ,				Red Parent Material (TF2)
Black Hi				y Mineral (F		MLRA 1)		Other (Explain in Remarks)
	n Sulfide (A4)			ed Matrix (F2)			
	Below Dark Surface	ce (A11)	☐ Depleted Ma				3.	
	rk Surface (A12)		Redox Dark	` ,			ી	Indicators of hydrophytic vegetation and
-	lucky Mineral (S1)			rk Surface (F	7)			wetland hydrology must be present,
	leyed Matrix (S4)		☐ Redox Depre	essions (F8)			1	unless disturbed or problematic.
	Layer (if present):							
Type:			_					
Depth (in	, -		_				Hydi	ric Soil Present? Yes 🛛 No 🗌
Remarks: Lo	w matrix chroma in	lower hor	izon with a peaty h	stic epipedor	n at the su	rface.		
LIV/DD 01 0								
HYDROLO								
Wetland Hy	drology Indicators	s:						
Primary Indi	cators (minimum of	one requir	ed; check all that a	ipply)				Secondary Indicators (2 or more required)
☐ Surface	Water (A1)		☐ Water-S	Stained Leave	es (B9) (e :	cept MLF	RA	☐ Water-Stained Leaves (B9) (MLRA 1, 2,
☐ High Wa	ter Table (A2)		1, 2	, 4A, and 4B)			4A, and 4B)
	on (A3)		☐ Salt Cru	ust (B11)				☐ Drainage Patterns (B10)
☐ Water M	arks (B1)		☐ Aquatio	Invertebrate	s (B13)			☐ Dry-Season Water Table (C2)
☐ Sedimer	t Deposits (B2)		☐ Hydrog	en Sulfide O	dor (C1)			☐ Saturation Visible on Aerial Imagery (C9)
	oosits (B3)		-	d Rhizosphe		Livina Roo	ts (C3)	☐ Geomorphic Position (D2)
-	t or Crust (B4)			ce of Reduce	_	•	(,	☐ Shallow Aquitard (D3)
_	osits (B5)			Iron Reducti)	☐ FAC-Neutral Test (D5)
-	Soil Cracks (B6)			or Stressed		,	,	Raised Ant Mounds (D6) (LRR A)
	on Visible on Aerial	Imagery (I		Explain in Re		·) (L IXIX A)		Frost-Heave Hummocks (D7)
	Vegetated Conca		,		iliaiks)			1 Tost-Heave Hummocks (DT)
Field Obser	=	de Sullace	(D0)					
		Vac 🗆 N	ula 🕅 - Danth (ina	hoo).				
Surface Wat			No 🛛 Depth (inc					
Water Table				hes): <u>@10"</u>				
Saturation P		Yes 🛛 1	No Depth (inc	hes): @ surfa	ace	Wetl	and Hy	drology Present? Yes ⊠ No □
(includes ca	corded Data (strea	m nauna r	nonitoring well aei	ial nhotos ni	evious ins	nections)	if avails	ahla.
2000IDC NG	co.dod Data (streat	gaage, i		iai priotos, pi	CVIOUS IIIC	,pootions),	availe	AD-10.
Degrand 144	atland I buda 1		-11 12 12 12 12 12 12 12 12 12 12 12 12 12	! ! -: -	46		ا امدا	and wanted along in a few sets described
Remarks: W	etiana Hydrology p	resent as s	son saturation with	solis moist to	tne surfac	e as is typ	oicai of s	saturated sloping forested mosaic systems.

Project/Site: Bond Road/SR 305		City/Count	y: <u>Poulsbo,</u>	Kitsap	Sampling Date: 11-2010 6-2016		
Applicant/Owner: Edward Rose and Sons				State: WA	Sampling Point: TH 2-	A	
Investigator(s): <u>J. Bartlett</u>			Section, To	ownship, Range: <u>S 10 & 11</u>	, T 26 N, R 1E.		
Landform (hillslope, terrace, etc.): hillslope		Local reli	ef (concave,	, convex, none): sloping	Slope (%): <u>5%</u>	
Subregion (LRR): MLRA 2							
Soil Map Unit Name: 41 Poulsbo gravelly sandy loam, 15-30							
Are climatic / hydrologic conditions on the site typical for this					-		
Are Vegetation, Soil, or Hydrology sign	-			ormal Circumstances" pres	ent? Yes⊠ No□		
Are Vegetation, Soil, or Hydrology natu				ed, explain any answers in			
SUMMARY OF FINDINGS – Attach site map						es, etc.	
Hydrophytic Vegetation Present? Yes ☐ No ☒							
Hydric Soil Present? Yes ☐ No ☒			ne Sampled		N7		
Wetland Hydrology Present? Yes ☐ No ☒		witr	nin a Wetlar	nd? Yes □ No) 🗵		
Remarks: Upland area on slope above delineated wetland	boundary a	nt WB A-3.					
VEGETATION – Use scientific names of plan	ts.						
Tree Stratum (Plot size: 30' diameter)	Absolute % Cover		Indicator	Dominance Test works			
Frangula purshiana		Yes		Number of Dominant Spo That Are OBL, FACW, or		(A)	
Acer macrophyllum	5%					(, ,)	
3				Total Number of Domina Species Across All Strata		(B)	
4				,		` ,	
Sapling/Shrub Stratum (Plot size: 30' diameter)	10%	= Total C	Cover	Percent of Dominant Spe That Are OBL, FACW, or		(A/B)	
1. Rubus spectabilis	10%	Yes	FAC	Prevalence Index work	sheet:		
2. Mahonia nervosa	10%	Yes	FACU		Multiply by:		
3. <u>Sambucus racemosa</u>	5%	Yes	FACU	OBL species			
4. Oemleria cerasiformis	<u>5%</u>			FACW species			
5. Vaccinium parvifolium	5%			FAC species			
Herb Stratum (Plot size: 30 feet)	<u>35%</u>	= Total C	Cover	FACU species			
Polystichum munitum	50%	Yes	FACU	UPL species			
2. Rubus ursinus	10%			Column Totals:	(A)	(D)	
3.				Prevalence Index	= B/A =		
4.				Hydrophytic Vegetation	n Indicators:		
5				☐ Dominance Test is >	50%		
6				☐ Prevalence Index is			
7				☐ Morphological Adapt	ations ¹ (Provide suppo or on a separate sheet		
8				☐ Wetland Non-Vascul		•)	
9				☐ Problematic Hydroph		ain)	
10				¹ Indicators of hydric soil	, , ,	,	
11				be present, unless distur			
Woody Vine Stratum (Plot size:)	60%	= Total C	Cover				
1. Rubus armeniacus	5%	Yes	FAC	Hydrophytic			
2	070	100	1710	Vegetation			
	<u>5%</u>	= Total C	Cover	Present? Yes	□ No ⊠		
% Bare Ground in Herb Stratum 40							
Remarks: The hydrophytic vegetation criterion is not met be	ecause the	re is less th	nan 50% doi	minance by FAC species.			

0-3"	COIOI (moisi)	%	Colo	Redox Features or (moist) % Type ¹ Lo	c ² Textu	ire Remarks
<u> </u>	Color (moist) 10YR 2/2	100%		76 Type Lo		ile itemaks
3-16"					<u>loam</u>	
3 10	10YR 4/3	100%			gr. sa	<u> </u>
Type: C=Co	ncentration, D=De	pletion, F	RM=Red	duced Matrix, CS=Covered or Coated Sa	and Grains.	² Location: PL=Pore Lining, M=Matrix.
				s, unless otherwise noted.)		ndicators for Problematic Hydric Soils ³ :
☐ Histosol (/	A1)			Sandy Redox (S5)		☐ 2 cm Muck (A10)
☐ Histic Epi	pedon (A2)			Stripped Matrix (S6)	_	Red Parent Material (TF2)
☐ Black Hist				Loamy Mucky Mineral (F1) (except MLF	RA 1)	Other (Explain in Remarks)
_ ,	Sulfide (A4)			Loamy Gleyed Matrix (F2)		
	Below Dark Surfac	ce (A11)		Depleted Matrix (F3)	3	
	k Surface (A12) ucky Mineral (S1)			Redox Dark Surface (F6) Depleted Dark Surface (F7)	_	Indicators of hydrophytic vegetation and wetland hydrology must be present,
-	eyed Matrix (S4)			Redox Depressions (F8)		unless disturbed or problematic.
	ayer (if present):			redux Depressions (1 s)		unioso distarsed of prosionidate.
	., ()					
• •	hes):				Hvdi	ric Soil Present? Yes ☐ No ⊠
. `				ause of the high chroma of the soil profi		
YDROLOG	3 Y					
Notional Hud						
wetiana nya	rology Indicators	s:				
-	rology Indicators ators (minimum of		ired; ch	eck all that apply)		Secondary Indicators (2 or more required)
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Primary Indicated W	ators (minimum of		iired; ch	_	t MLRA	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
Primary Indicated N	ators (minimum of Vater (A1) er Table (A2)		iired; ch	☐ Water-Stained Leaves (B9) (excep	t MLRA	☐ Water-Stained Leaves (B9) (MLRA 1, 2
Primary Indicate Surface W High Wate	ators (minimum of Vater (A1) er Table (A2) n (A3)		iired; ch	☐ Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B)	t MLRA	☐ Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
Primary Indica Surface W High Wate Saturation Water Ma	ators (minimum of Vater (A1) er Table (A2) n (A3)		iired; ch	☐ Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) ☐ Salt Crust (B11)	t MLRA	 □ Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2)
Primary Indica Surface W High Wate Saturation Water Ma	ators (minimum of Vater (A1) er Table (A2) n (A3) irks (B1) Deposits (B2)		iired; ch	☐ Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) ☐ Salt Crust (B11) ☐ Aquatic Invertebrates (B13)		 □ Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (CS)
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Primary Indica Surface W High Wate Saturation Water Ma Sediment Drift Depo	ators (minimum of Vater (A1) er Table (A2) n (A3) lrks (B1) Deposits (B2) osits (B3) or Crust (B4)		iired; ch	Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin	g Roots (C3)	 □ Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (CS □ Geomorphic Position (D2)
Primary Indica Surface W High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo	ators (minimum of Vater (A1) er Table (A2) n (A3) lrks (B1) Deposits (B2) osits (B3) or Crust (B4)		ired; ch	Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4)	g Roots (C3) Is (C6)	 □ Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (CS □ Geomorphic Position (D2) □ Shallow Aquitard (D3)
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Primary Indica Surface W High Water Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely W Field Observ Surface Wate	ators (minimum of Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5) soil Cracks (B6) n Visible on Aerial Vegetated Concav rations:	Imagery re Surface	(B7) e (B8)	Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Stunted or Stressed Plants (D1) (L	g Roots (C3) Is (C6)	 □ Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (CS □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A)
Primary Indica Surface W High Water Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely Water Table F Saturation Pre (includes capi	ators (minimum of Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5) soil Cracks (B6) n Visible on Aerial Vegetated Concav rations: er Present? Present? esent? eillary fringe)	Imagery ve Surface Yes Yes Yes Yes Yes Yes	(B7) e (B8) No ⊠ No ⊠ No ⊠	Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Stunted or Stressed Plants (D1) (L Other (Explain in Remarks) Depth (inches):	g Roots (C3) ls (C6) RR A) Wetland Hy	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C3) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Primary Indica Surface W High Water Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundatior Sparsely V Field Observ Water Table F Saturation Pre (includes capi	ators (minimum of Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5) soil Cracks (B6) n Visible on Aerial Vegetated Concav rations: er Present? Present? esent? eillary fringe)	Imagery ve Surface Yes Yes Yes Yes Yes Yes	(B7) e (B8) No ⊠ No ⊠ No ⊠	□ Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soi Stunted or Stressed Plants (D1) (L1) □ Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches):	g Roots (C3) ls (C6) RR A) Wetland Hy	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C3) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
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Project/Site: Bond Road/SR 305		City/Coun	ity: <u>Poulsbo,</u>	Kitsap	Sampling Date: 11/201	0 6-2016
Applicant/Owner: Edward Rose and Sons				State: WA	Sampling Point: TH 3-	Α
Investigator(s): <u>J. Bartlett</u>			Section, To	ownship, Range: <u>S 10 & 11</u>	, T 26 N, R 1E.	
Landform (hillslope, terrace, etc.): hillslope		Local rel	ief (concave,	, convex, none): sloping	Slope (%)): <u>5%</u>
Subregion (LRR): MLRA 2	Lat:			Long:	Datum:	
Soil Map Unit Name: 41 Poulsbo gravelly sandy loam, 15-30						
Are climatic / hydrologic conditions on the site typical for this						
Are Vegetation, Soil, or Hydrology sign	-			ormal Circumstances" pres	ent? Yes⊠ No □	
Are Vegetation, Soil, or Hydrology natu				ed, explain any answers in		
SUMMARY OF FINDINGS – Attach site map						es, etc.
Liverantica Variation Present?						
Hydrophytic Vegetation Present? Yes ⊠ No ☐ Hydric Soil Present? Yes ☐ No ☑			he Sampled		_	
Wetland Hydrology Present? Yes □ No ☒		wit	hin a Wetlar	nd? Yes ☐ No	o 🛛	
Remarks: Upland within a short dry trough that extends do located just upslope of WB A-12 and A-13.	wnslope fro	m the leve	el upland occ	cupying the western portion	s of the site. Specifical	ly
located just upslope of WB A-12 and A-15.						
VEGETATION – Use scientific names of plant	ts.					
			nt Indicator	Dominance Test works	heet:	-
Tree Stratum (Plot size: 30' diameter)		•	? Status	Number of Dominant Sp		(4)
Frangula purshiana				That Are OBL, FACW, o	r FAC: 2	(A)
3				Total Number of Domina Species Across All Strat		(B)
4						(D)
		= Total		Percent of Dominant Spe That Are OBL, FACW, o		(A/B)
Sapling/Shrub Stratum (Plot size: 30' diameter)						
1. Rubus spectabilis	25%			Prevalence Index work		
2. <u>Sambucus racemosa</u>			FACU	OBL species	Multiply by:	
3				FACW species		
5				FAC species		
	30%			FACU species		
Herb Stratum (Plot size: 30 feet)				UPL species	x 5 =	
1. Polystichum munitum	25%	Yes	<u>FACU</u>	Column Totals:	(A)	(B)
2. Dryopteris expansa			FACW	Prevalence Index	= B/A =	
3. <u>Tiarellia trifoliata</u>				Hydrophytic Vegetation		
4				Dominance Test is >		
6.				☐ Prevalence Index is	3.0 ¹	
7					tations ¹ (Provide suppor	
8					or on a separate sheet)
9				☐ Wetland Non-Vascul		.:\
10				☐ Problematic Hydroph ¹Indicators of hydric soil		•
11				be present, unless distu		must
Woody Vine Stratum (Plot size:)	45%	= Total	Cover			
1				Hydrophytic		
2				Vegetation		
				Present? Yes	No □	
% Bare Ground in Herb Stratum <u>55</u>						
Remarks: The hydrophytic vegetation criterion is met beca	use there is	greater th	nan 50% don	ninance by FAC species.		

Depth (inches)	Matrix Color (moist)	%	Colc	or (moist) % Type ¹ Lo	c ² Textu	ure Remarks
0-9"	10YR 2/2	100%				Romano
<u>-</u>					loam	
9-16"	10YR 4/4	100%			gr. sa	lo
16	10YR 4/3	100%	- —		gr sa l	lo
		_				
						 -
				duced Matrix, CS=Covered or Coated Sa		² Location: PL=Pore Lining, M=Matrix.
-		icable to		s, unless otherwise noted.)		ndicators for Problematic Hydric Soils ³ :
Histosol (Sandy Redox (S5)	_	2 cm Muck (A10)
	ipedon (A2)			Stripped Matrix (S6)		Red Parent Material (TF2)
☐ Black His☐ Hydroger	n Sulfide (A4)			Loamy Mucky Mineral (F1) (except MLI Loamy Gleyed Matrix (F2)	KAI) L	Other (Explain in Remarks)
	Below Dark Surfa	ace (A11)		Depleted Matrix (F3)		
	rk Surface (A12)	100 (7111)		Redox Dark Surface (F6)	3	Indicators of hydrophytic vegetation and
	ucky Mineral (S1)			Depleted Dark Surface (F7)		wetland hydrology must be present,
	leyed Matrix (S4)			Redox Depressions (F8)		unless disturbed or problematic.
Restrictive L	_ayer (if present):	:				
Type:						
					Hydi	ric Soil Present? Yes ☐ No 🛛
Depth (inc	ches):				yu.	no con i resent. Tes 🖂 No 🖂
. `	,		met bec	ause of the high chroma of the soil profi	'	
	e hydric soil criteri		met bec	ause of the high chroma of the soil profi	'	TO CONTROCKE TO COME TO COME
Remarks: The	e hydric soil criteri	ion is not i	met bec	ause of the high chroma of the soil profi	'	
Remarks: The	e hydric soil criteri	ion is not i		ause of the high chroma of the soil profi	'	Secondary Indicators (2 or more required)
YDROLOG Wetland Hyd Primary Indic	GY drology Indicator	ion is not i			le.	
YDROLOG Wetland Hyd Primary Indic Surface V	GY drology Indicator	ion is not i		eck all that apply)	le.	Secondary Indicators (2 or more required)
YDROLOG Wetland Hyde Primary Indic Surface V High Wat	GY drology Indicator cators (minimum o Water (A1) ter Table (A2)	ion is not i		eck all that apply)	le.	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2
YDROLOG Wetland Hyde Primary Indic Surface V High Wat	GY drology Indicator eators (minimum o Nater (A1) ter Table (A2) n (A3)	ion is not i		eck all that apply) ☐ Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B)	le.	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
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YDROLOG Wetland Hyd Primary Indic Surface V High Wat Saturation Water Ma	GY drology Indicator cators (minimum or Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2)	ion is not i		eck all that apply) Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13)	ot MLRA	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C5)
YDROLOG Wetland Hyd Primary Indic Surface V High Wat Saturation Water Mater	GY drology Indicator cators (minimum or Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2)	ion is not i		eck all that apply) Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	ot MLRA	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C5)
YDROLOG Wetland Hyd Primary Indic Surface V High Wat Saturation Water Ma Sediment Drift Depo	GY drology Indicator eators (minimum o Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4)	ion is not i		eck all that apply) Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin	ot MLRA g Roots (C3)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C3) Geomorphic Position (D2)
Wetland Hydeligh Water Mail Sediment Drift Depo	GY drology Indicator eators (minimum o Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4)	ion is not i		eck all that apply) Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4)	g Roots (C3)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C3) Geomorphic Position (D2) Shallow Aquitard (D3)
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YDROLOG Wetland Hyd Primary Indic Surface V High Wat Saturation Water Ma Sediment Drift Depot Algal Mat Iron Depot Surface S Inundation Sparsely Field Observers Surface Water Table Saturation Proportion of the property o	GY drology Indicator eators (minimum or Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aeria Vegetated Conca vations: er Present? Present? resent? present?	I Imagery ve Surface Yes Yes Yes Yes Yes Yes Yes Yes	(B7) e (B8) No ⊠ No ⊠	eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Stunted or Stressed Plants (D1) (L	g Roots (C3) lls (C6) RR A) Wetland Hy	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C3 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
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Project/Site: Bond Road/SR 305		City/Count	ty: <u>Poulsbo,</u>	Kitsap	Sampling Date: 11/201	10 6-2016
Applicant/Owner: Edward Rose and Sons				State: WA	Sampling Point: TH 4-	-A
Investigator(s): <u>J. Bartlett</u>			Section, To	ownship, Range: <u>S 10 & 11</u>	, T 26 N, R 1E.	
Landform (hillslope, terrace, etc.): hillslope		Local reli	ef (concave,	, convex, none): sloping	Slope (%): <u>5%</u>
Subregion (LRR): MLRA 2	_ Lat:		•	Long:	Datum:	
Soil Map Unit Name: 41 Poulsbo gravelly sandy loam, 15-30						
Are climatic / hydrologic conditions on the site typical for this						
Are Vegetation, Soil, or Hydrology sign	-			ormal Circumstances" pres	ent? Yes⊠ No □	
Are Vegetation, Soil, or Hydrology natu				ed, explain any answers in		
SUMMARY OF FINDINGS – Attach site map						es, etc.
Hydrophytic Vegetation Present? Yes ☐ No ☐ Hydric Soil Present? Yes ☐ No ☐ Yes ☐ No ☐ N			he Sampled			
Wetland Hydrology Present? Yes ☐ No ☒		with	nin a Wetlar	nd? Yes □ N	o 🛮	
Remarks: Upland at lower end (ends at the wetland bound				nds downslope from the le	vel upland occupying th	ne
western portions of the site. Specifically located just upslop	oe of WB A-	20 and A-	21.			
VEGETATION – Use scientific names of plant	ts.					
			t Indicator	Dominance Test works	heet:	
Tree Stratum (Plot size: 30' diameter)		•	Status	Number of Dominant Sp		(4)
Pseudotsuga menziesii				That Are OBL, FACW, o	r FAC: 1	(A)
2 3				Total Number of Domina Species Across All Strat		(B)
4.				,		(D)
		= Total C		Percent of Dominant Sp That Are OBL, FACW, o		(A/B)
Sapling/Shrub Stratum (Plot size: 30' diameter)						
1. Oemleria cerasiformis	20%			Prevalence Index work		
2. Rubus spectabilis				OBL species	Multiply by:	
3				FACW species		
5				FAC species		
		= Total C		FACU species		
Herb Stratum (Plot size: 30 feet)				UPL species	x 5 =	<u>—</u>
1. Polystichum munitum	35%	Yes	FACU	Column Totals:	(A)	(B)
2. Rubus ursinus		Yes	FACU FAC	Prevalence Index	= B/A =	
Athyrium filix-femina 4				Hydrophytic Vegetatio		
5				☐ Dominance Test is >		
6				☐ Prevalence Index is	3.0 ¹	
7					tations¹ (Provide suppo	
8					or on a separate sheet	i)
9				☐ Wetland Non-Vascu☐ Problematic Hydropl		ain)
10				¹ Indicators of hydric soil		,
11				be present, unless distu		maor
Woody Vine Stratum (Plot size:)	55%	= Total C	Cover			
1				Hydrophytic		
2				Vegetation Present? Yes	□ No M	
		= Total C	Cover	riesent: Tes	s □ No ⊠	
% Bare Ground in Herb Stratum <u>45</u> Remarks: The hydrophytic vegetation criterion was not me	t hacauso +	nere is los	s than 500/	cover by FAC enocies		
Tromains. The hydrophytic vegetation chienon was not me	เ มธบสนุจิษ แ	icic is ies	ы шан ЭU% (ouver by I AO species.		

Depth (inches)	Matrix Color (moist)	%	Colo	Redox Features or (moist) % Type ¹ Lo	oc² Te	xture Remarks
-	, ,			or (moist) /6 Type Lo		
0-4"	10YR 2/2	100%			<u>loar</u>	
4-13"	10YR 4/4	100%			<u>gr. s</u>	sa lo
<u>13-</u>	10YR 4/3	100%			<u>grs</u>	a lo
	-					
, ·	•			duced Matrix, CS=Covered or Coated S	and Grains	<u> </u>
Hydric Soil	Indicators: (App	licable to	all LRR	ts, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
☐ Histoso	, ,			Sandy Redox (S5)		2 cm Muck (A10)
	pipedon (A2)			Stripped Matrix (S6)		Red Parent Material (TF2)
	listic (A3)			Loamy Mucky Mineral (F1) (except ML	.RA 1)	Other (Explain in Remarks)
	en Sulfide (A4) ed Below Dark Surfa	200 (411)		Loamy Gleyed Matrix (F2) Depleted Matrix (F3)		
	ark Surface (A12)	ace (ATT)		Redox Dark Surface (F6)		³ Indicators of hydrophytic vegetation and
	Mucky Mineral (S1)			Depleted Dark Surface (F7)		wetland hydrology must be present,
	Gleyed Matrix (S4)			Redox Depressions (F8)		unless disturbed or problematic.
Restrictive	Layer (if present)):		• • • • • • • • • • • • • • • • • • • •		·
Type:						
Depth (ir	nches):				H	ydric Soil Present? Yes ☐ No 🏻
Remarks: T	he hydric soil criter	rion is not r	met hec	ause of the high chroma of the soil prof	file	
HYDROLO	OGY					
	OGY ydrology Indicator	rs:				
Wetland Hy			iired; ch	eck all that apply)		Secondary Indicators (2 or more required)
Wetland Hy	ydrology Indicator		ired; ch	eck all that apply) Water-Stained Leaves (B9) (exceptions)	pt MLRA	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hy Primary Ind Surface	ydrology Indicator licators (minimum o		iired; ch		pt MLRA	
Wetland Hy Primary Ind Surface	ydrology Indicator icators (minimum o Water (A1) ater Table (A2)		ired; ch	☐ Water-Stained Leaves (B9) (exception)	pt MLRA	☐ Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hy Primary Ind ☐ Surface ☐ High Wa	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) ion (A3)		ired; ch	☐ Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B)	pt MLRA	☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hy Primary Ind ☐ Surface ☐ High Wa ☐ Saturati ☐ Water M	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) ion (A3)		iired; ch	 Water-Stained Leaves (B9) (except1, 2, 4A, and 4B) Salt Crust (B11)	pt MLRA	
Wetland Hy Primary Ind □ Surface □ High Wa □ Saturati □ Water M □ Sedime	ydrology Indicator icators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1)		iired; ch	☐ Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) ☐ Salt Crust (B11) ☐ Aquatic Invertebrates (B13)		 □ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9)
Wetland Hy Primary Ind ☐ Surface ☐ High Water Now Sedime ☐ Drift De	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) ion (A3) Marks (B1) nt Deposits (B2)		iired; ch	 Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) 		 □ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9)
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Wetland Hy Primary Ind Surface High Wa Saturati Water M Sedime Drift De Algal Ma	ydrology Indicator icators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4)		iired; ch	Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4)	ng Roots (C	 Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9 3) □ Geomorphic Position (D2) □ Shallow Aquitard (D3)
Wetland Hy Primary Ind Surface High Wa Saturati Water M Sedime Drift De Algal Ma Iron De Surface	ydrology Indicator icators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	of one requ		Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	ng Roots (C	 Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9 3) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5)
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Project/Site: Bond Road/SR 305		City/Coun	ty: <u>Poulsbo,</u>	Kitsap	Sampling Date: 11/201	0 6-201 <u>6</u>
Applicant/Owner: Edward Rose and Sons				State: WA	Sampling Point: TH 5-/	4
Investigator(s): <u>J. Bartlett</u>			Section, To	ownship, Range: <u>S 10 & 1</u>	1, T 26 N, R 1E.	
Landform (hillslope, terrace, etc.): hillslope		Local reli	ief (concave,	, convex, none): sloping	Slope (%)	: <u>5%</u>
Subregion (LRR): MLRA 2	_ Lat:			Long:	Datum:	
Soil Map Unit Name: 41 Poulsbo gravelly sandy loam, 15-30						
Are climatic / hydrologic conditions on the site typical for this						
Are Vegetation, Soil, or Hydrology sign	-			ormal Circumstances" pres		
Are Vegetation, Soil, or Hydrology natu				ed, explain any answers ir		
SUMMARY OF FINDINGS – Attach site map						s, etc.
Hydrophytic Vegetation Present? Yes ⊠ No ☐ Hydric Soil Present? Yes ☐ No ☑			he Sampled			
Wetland Hydrology Present? Yes □ No ☒		with	hin a Wetlar	nd? Yes □ N	0 ⊠	
Remarks: About 75 feet up the long dry trough that ends a	t wetland bo	oundary be	etween WB A	A-20 and WB A-21. Upland	trough with no evidenc	e of
water flow or wetland conditions.						
VEGETATION – Use scientific names of plan	ts.					
		Dominan	t Indicator	Dominance Test works	sheet:	
Tree Stratum (Plot size: 30' diameter)		•	? Status	Number of Dominant Sp		(*)
1. Alnus rubra	15%			That Are OBL, FACW, o	or FAC: 3	(A)
2				Total Number of Domina		(D)
3				Species Across All Strat		(D)
		= Total (Percent of Dominant Sp That Are OBL, FACW, of		(Δ/R)
Sapling/Shrub Stratum (Plot size: 30' diameter)						(A/D)
1. Rubus spectabilis	40%			Prevalence Index work		
2. <u>Sambucus racemosa</u>			<u>FACU</u>		Multiply by:	
3				-	x 1 =	
4				FACW species FAC species		
5		= Total (FACU species		
Herb Stratum (Plot size: 30 feet)	1070	- rotar (00101	-	x 5 =	_
Polystichum munitum	25%	Yes	FACU		(A)	(B)
2. Rubus ursinus	15%	Yes	FACU		D/A	
3. <u>Dryopteris expansa</u>	10%		FACW	Hydrophytic Vegetation	= B/A =	
4				Dominance Test is:		
5				☐ Prevalence Index is		
6 7					tations ¹ (Provide suppor	ting
8.					or on a separate sheet)	
9.				Wetland Non-Vascu		
10					hytic Vegetation ¹ (Explai	•
11				'Indicators of hydric soil be present, unless distu	and wetland hydrology in the domination of problematic.	must
		= Total (Cover			
Woody Vine Stratum (Plot size:)				Herdina in herdina		
1				Hydrophytic Vegetation		
2		= Total (s⊠ No □	
% Bare Ground in Herb Stratum 50	-	- rotar (30101			
Remarks: The hydrophytic vegetation criterion is met beca	use there is	greater th	nan 50% cov	er by FAC and FACW spe	cies.	

0.6° 10YR 2/2 100%	
Self-4" 10YR 4/4 100% gr.s	ture Remarks
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1)	
"Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Sandy Redox (S5) Histo Epipedon (A2) Black Histic (A3) Depleted Matrix (S6) Black Histic (A3) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Sandy Gleyed Matrix (F2) Pedox Dark Surface (F7) Restrictive Layer (if present): Type: Depth (inches): Remarks: The hydric soil criterion is not met because of the high chroma of the soil profile. Hydrogory Matrix (A1) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Saturation (A3) Salt Crust (B11) Water Marks (B1) Orift Deposits (B3) Origidate Mineral (B4) Drift Deposits (B5) Origidate Mineral (B4) Origida	a lo
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1)	<u>lo</u>
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Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1)	21 and the District Manager
Histosol (A1)	² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :
Histic Epipedon (A2)	2 cm Muck (A10)
Black Histic (A3)	Red Parent Material (TF2)
Depleted Below Dark Surface (A11) □ Depleted Matrix (F3) □ Thick Dark Surface (A12) □ Redox Dark Surface (F6) □ Sandy Mucky Mineral (S1) □ Depleted Dark Surface (F7) □ Sandy Gleyed Matrix (S4) □ Redox Depressions (F8) □ Redox Depressions (F8) □ Restrictive Layer (if present): Type: □ Depth (inches): □ Hty Parent (Inches): □ Hty Par	Other (Explain in Remarks)
☐ Thick Dark Surface (A12) ☐ Redox Dark Surface (F6) ☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7) ☐ Sandy Gleyed Matrix (S4) ☐ Redox Depressions (F8) Restrictive Layer (if present): Type:	
Sandy Mucky Mineral (S1) □ Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) □ Redox Depressions (F8) Restrictive Layer (if present): Type:	
□ Sandy Gleyed Matrix (S4) □ Redox Depressions (F8) Restrictive Layer (if present): Type: □ Depth (inches): □ Depth (inches): □ Depth (inches): □ Hy Remarks: The hydric soil criterion is not met because of the high chroma of the soil profile. YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) □ Surface Water (A1) □ Water-Stained Leaves (B9) (except MLRA □ High Water Table (A2) 1, 2, 4A, and 4B) □ Saturation (A3) □ Salt Crust (B11) □ Water Marks (B1) □ Aquatic Invertebrates (B13) □ Sediment Deposits (B2) □ Hydrogen Sulfide Odor (C1) □ Drift Deposits (B3) □ Oxidized Rhizospheres along Living Roots (C □ Algal Mat or Crust (B4) □ Presence of Reduced Iron (C4) □ Iron Deposits (B5) □ Recent Iron Reduction in Tilled Soils (C6) □ Surface Soil Cracks (B6) □ Stunted or Stressed Plants (D1) (LRR A) □ Inundation Visible on Aerial Imagery (B7) □ Other (Explain in Remarks) □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No □ Depth (inches): □ Water Table Present?	³ Indicators of hydrophytic vegetation and
Restrictive Layer (if present): Type:	wetland hydrology must be present,
Type:	unless disturbed or problematic.
Primary Indicators (minimum of one required; check all that apply) Surface Water (A1)	
Properties of the high chroma of the soil profile. YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Water-Stained Leaves (B9) (except MLRA High Water Table (A2) 1, 2, 4A, and 4B) Saturation (A3) Saturation (A3) Saturation (A3) Hydrogen Sulfide Odor (C1) Drift Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1) (LRR A) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8) Depth (inches): Wetland Includes Capillary fringe) Wetland Includes Capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available capillary fringe Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available capillary fringe Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available capillary fringe Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available capillary fringe Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available capillary fringe Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available capillary fringe Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available capillary fringe Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available capillary fringe Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available capillary fringe Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if	drie Ceil Brasser (C. Vee 🗔 Ne 💆
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) Water-Stained Leaves (B9) (except MLRA High Water Table (A2) 1, 2, 4A, and 4B) Saturation (A3) Salt Crust (B11) Water Marks (B1) Aquatic Invertebrates (B13) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Wetland Includes capillary fringe) Wetland Includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available previous inspec	dric Soil Present? Yes ☐ No 🛛
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Surface Water (A1)	Secondary Indicators (2 or more required)
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□ Saturation (A3) □ Salt Crust (B11) □ Water Marks (B1) □ Aquatic Invertebrates (B13) □ Sediment Deposits (B2) □ Hydrogen Sulfide Odor (C1) □ Drift Deposits (B3) □ Oxidized Rhizospheres along Living Roots (C □ Algal Mat or Crust (B4) □ Presence of Reduced Iron (C4) □ Iron Deposits (B5) □ Recent Iron Reduction in Tilled Soils (C6) □ Surface Soil Cracks (B6) □ Stunted or Stressed Plants (D1) (LRR A) □ Inundation Visible on Aerial Imagery (B7) □ Other (Explain in Remarks) □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No ☒ Depth (inches): □ □ □ Wetland Includes Capillary fringe) □ Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available of the properties of the provious inspections), if available of the properties of the	4A, and 4B)
□ Water Marks (B1) □ Aquatic Invertebrates (B13) □ Sediment Deposits (B2) □ Hydrogen Sulfide Odor (C1) □ Drift Deposits (B3) □ Oxidized Rhizospheres along Living Roots (C □ Algal Mat or Crust (B4) □ Presence of Reduced Iron (C4) □ Iron Deposits (B5) □ Recent Iron Reduction in Tilled Soils (C6) □ Surface Soil Cracks (B6) □ Stunted or Stressed Plants (D1) (LRR A) □ Inundation Visible on Aerial Imagery (B7) □ Other (Explain in Remarks) □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No ☒ Depth (inches): Water Table Present? Yes □ No ☒ Depth (inches): Water Table Present? Yes □ No ☒ Depth (inches): Saturation Present? Yes □ No ☒ Depth (inches): (includes capillary fringe) Wetland Includes Capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available provided includes capillary fringe	☐ Drainage Patterns (B10)
□ Sediment Deposits (B2) □ Hydrogen Sulfide Odor (C1) □ Drift Deposits (B3) □ Oxidized Rhizospheres along Living Roots (C □ Algal Mat or Crust (B4) □ Presence of Reduced Iron (C4) □ Iron Deposits (B5) □ Recent Iron Reduction in Tilled Soils (C6) □ Surface Soil Cracks (B6) □ Stunted or Stressed Plants (D1) (LRR A) □ Inundation Visible on Aerial Imagery (B7) □ Other (Explain in Remarks) □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No ☑ Depth (inches): □ Water Table Present? Yes □ No ☑ Depth (inches): □ Wetland Includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available provided in the provided stream gauge, monitoring well, aerial photos, previous inspections), if available provided in the provided stream gauge in the provided	☐ Dry-Season Water Table (C2)
□ Drift Deposits (B3) □ Oxidized Rhizospheres along Living Roots (C□ Algal Mat or Crust (B4) □ Presence of Reduced Iron (C4) □ Iron Deposits (B5) □ Recent Iron Reduction in Tilled Soils (C6) □ Sturface Soil Cracks (B6) □ Stunted or Stressed Plants (D1) (LRR A) □ Inundation Visible on Aerial Imagery (B7) □ Other (Explain in Remarks) □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No ☑ Depth (inches): □ Water Table Present? Yes □ No ☑ Depth (inches): □ Wetland Includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available processing the process of Reduced Iron (C4) □ Presence of R	☐ Saturation Visible on Aerial Imagery (CS
□ Algal Mat or Crust (B4) □ Presence of Reduced Iron (C4) □ Iron Deposits (B5) □ Recent Iron Reduction in Tilled Soils (C6) □ Surface Soil Cracks (B6) □ Stunted or Stressed Plants (D1) (LRR A) □ Inundation Visible on Aerial Imagery (B7) □ Other (Explain in Remarks) □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No ☒ Depth (inches): □ Water Table Present? Yes □ No ☒ Depth (inches): □ Water Table Present? Yes □ No ☒ Depth (inches): □ Wetland Includes capillary fringe) □ Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available of the present of the pres	_
□ Iron Deposits (B5) □ Recent Iron Reduction in Tilled Soils (C6) □ Surface Soil Cracks (B6) □ Stunted or Stressed Plants (D1) (LRR A) □ Inundation Visible on Aerial Imagery (B7) □ Other (Explain in Remarks) □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No ☒ Depth (inches): □ □ □ Water Table Present? Yes □ No ☒ Depth (inches): □ □ □ □ Saturation Present? Yes □ No ☒ Depth (inches): □ □ □ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	☐ Shallow Aquitard (D3)
□ Surface Soil Cracks (B6) □ Stunted or Stressed Plants (D1) (LRR A) □ Inundation Visible on Aerial Imagery (B7) □ Other (Explain in Remarks) □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No ☒ Depth (inches): □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	• • •
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in Remarks) ☐ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): Water Table Present? Yes ☐ No ☒ Depth (inches): Saturation Present? Yes ☐ No ☒ Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available of the properties of	L L FAC-Neutral Lest (D5)
□ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No ☒ Depth (inches): Water Table Present? Yes □ No ☒ Depth (inches): Saturation Present? Yes □ No ☒ Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available of the properties of	☐ FAC-Neutral Test (D5) ☐ Raised Ant Mounds (D6) (LRR A)
Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Wetland I (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available and the content of the con	Raised Ant Mounds (D6) (LRR A)
Surface Water Present? Yes \(\) No \(\) Depth (inches): \(\) Water Table Present? Yes \(\) No \(\) Depth (inches): \(\) Saturation Present? Yes \(\) No \(\) Depth (inches): \(\) (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available and the content of the conten	` '
Water Table Present? Yes □ No ☑ Depth (inches): Saturation Present? Yes □ No ☑ Depth (inches): Wetland I (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available and the present of the present o	Raised Ant Mounds (D6) (LRR A)
Saturation Present? Yes \(\sum \) No \(\sum \) Depth (inches): \(\sum \) Wetland I (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available to the content of the con	Raised Ant Mounds (D6) (LRR A)
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections).	Raised Ant Mounds (D6) (LRR A)
	☐ Raised Ant Mounds (D6) (LRR A) ☐ Frost-Heave Hummocks (D7)
Remarks: No hydrology or evidence of wetland hydrology in this area.	Raised Ant Mounds (D6) (LRR A)
Remarks: No hydrology or evidence of wetland hydrology in this area.	☐ Raised Ant Mounds (D6) (LRR A) ☐ Frost-Heave Hummocks (D7)
	☐ Raised Ant Mounds (D6) (LRR A) ☐ Frost-Heave Hummocks (D7)
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	☐ Raised Ant Mounds (D6) (LRR A) ☐ Frost-Heave Hummocks (D7)

Project/Site: Bond Road/SR 305		City/Cour	nty: <u>Poulsbo,</u>	Kitsap	Sampling Date: 11/2010 6-2016
Applicant/Owner: Edward Rose and Sons				State: WA	Sampling Point: TH 6-A
Investigator(s): <u>J. Bartlett</u>			_ Section, To	wnship, Range: <u>S 10 & 11</u>	, T 26 N, R 1E.
Landform (hillslope, terrace, etc.): hillslope					
Subregion (LRR): MLRA 2					
Soil Map Unit Name: 41 Poulsbo gravelly sandy loam, 15-30					
Are climatic / hydrologic conditions on the site typical for this					1011. <u>11 05</u>
	-			ormal Circumstances" pres	ont? Voc ⊠ No □
Are Vegetation, Soil, or Hydrology sign				•	
Are Vegetation, Soil, or Hydrology natu				ed, explain any answers in	
SUMMARY OF FINDINGS – Attach site map	snowing	sampıı	ing point io	ocations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes ⊠ No □		Is	the Sampled	Area	
Hydric Soil Present? Yes ⊠ No □			_	nd? Yes⊠ No	\Box
Wetland Hydrology Present? Yes ⊠ No □					
Remarks: Forested mosaic wetland area below the dry troe 6-17-16 and all flags were observed. No changes have oc	ugh sampled curred to the	d at Test e wetland	Holes 4-A and d boundary or	d 5-A and near WB A-22. The wetland itself since the	Wetland boundary verified on 2010 delineation was
completed.					,, , , , , , , , , , , , , , , , , ,
VEGETATION – Use scientific names of plan	ts.				
	Absolute		nt Indicator	Dominance Test works	heet:
Tree Stratum (Plot size: 30' diameter)		-	s? Status	Number of Dominant Spe	
1. Alnus rubra			<u>FAC</u>	That Are OBL, FACW, or	r FAC: <u>5</u> (A)
2. Thuja plicata			<u>FAC</u>	Total Number of Domina	
3				Species Across All Strata	a: <u>6</u> (B)
4	10%	- Total	Cover	Percent of Dominant Spe	
Sapling/Shrub Stratum (Plot size: 30' diameter)	10 /0	= Total	Cover	That Are OBL, FACW, or	r FAC: <u>83%</u> (A/B)
1. Rubus spectabilis	10%	Yes	FAC	Prevalence Index works	sheet:
2					Multiply by:
3					x 1 =
4		-			x 2 =
5					x 3 =
Herb Stratum (Plot size: 30 feet)	10%	= Total	Cover		x 4 =
1. Rubus ursinus	30%	Yes	FACU		x 5 = (A) (B)
2. Carex obnupta	20%	Yes	OBL	Column rotals.	(A) (D)
3. Athyrium filix-femina	20%	Yes	FAC	Prevalence Index :	= B/A =
4. Blechnum spicant	15%	No	FAC	Hydrophytic Vegetation	n Indicators:
5. Lysichiton americanum	10%	No	OBL	□ Dominance Test is >	50%
6. Dryopteris expansa	5%	No	FACW	☐ Prevalence Index is	
7					ations ¹ (Provide supporting or on a separate sheet)
8				☐ Wetland Non-Vascul	
9					nytic Vegetation ¹ (Explain)
10					and wetland hydrology must
11		-		be present, unless distur	
Woody Vine Stratum (Plot size:)	100%	= Total	Cover		
1				Hydrophytic	
2				Vegetation	
				Present? Yes	⊠ No □
% Bare Ground in Herb Stratum					
Remarks: The hydrophytic vegetation criterion is met beca	use there is	greater t	than 50% cov	er by FAC and OBL specie	·S.

(inches)	Color (moist)	%	_ Cold	or (moist)	%	Type ¹	Loc ²	_Textu	<u>re</u>		Rer	<u>naik</u> s	
)-16"	10YR 2/2	100%				7,		peat					
10	1011(2/2	10078						реаг					
		_											
	-												
,,	oncentration, D=De	•		•			ed Sand G					Lining, M=I	
ydric Soil I	ndicators: (Appl	icable to	all LRR	s, unless other	wise noted	d.)		Ir	ndicato	rs for P	roblema	itic Hydric	Soils ³ :
Histosol (' '			Sandy Redox (S	,					Muck (A	,		
•	pedon (A2)			Stripped Matrix	` '	,					Material (` '	
Black His	, ,			Loamy Mucky M		(except	MLRA 1)	L	_ Othe	r (Explai	in in Ren	narks)	
	n Sulfide (A4) Below Dark Surfa	00 (111)		Loamy Gleyed N Depleted Matrix	` ,								
	rk Surface (A12)	ice (ATT)	_	Redox Dark Sur	` '			31	ndicato	re of by	drophytic	vegetation	and
	ucky Mineral (S1)			Depleted Dark S	` ,)				-		st be prese	
•	eyed Matrix (S4)			Redox Depressi	` '	,				-		oblematic.	,
	ayer (if present):	 :			(- /								
_													
· ·	:hes):							Hydr	ic Soil	Present	t? Yes	s⊠ No [7
emarks: The dicators A1	e soil profile revea and A4.			t least 16 inches	s deep with	hydroge	en sulfide (odor emi	tted so	it exhibit	ts charac	cteristics fo	r hydric so
emarks: The adicators A1	e soil profile revea and A4.	led organ		t least 16 inches	s deep with	hydroge	en sulfide o	odor emi	tted so	it exhibit	ts charac	cteristics fo	r hydric sc
Remarks: The hadicators A1	e soil profile revea and A4. GY Irology Indicator	aled organ	nic soil a			hydroge	en sulfide o	odor emi					
remarks: The adicators A1	e soil profile revea and A4. GY Irology Indicator ators (minimum of	aled organ	nic soil a	eck all that appl	у)				Secon	ndary Inc	dicators ((2 or more I	required)
Pemarks: The adicators A1 POROLOGICAL STREET STREE	e soil profile revea and A4. GY Irology Indicator ators (minimum of Vater (A1)	aled organ	nic soil a	eck all that appl ☐ Water-Stai	y) ned Leaves				Secon	ndary Inc ater-Sta	<u>dicators (</u> ined Lea		required)
emarks: The dicators A1 /DROLOG /etland Hydrimary Indic Surface V High Wat	e soil profile revea and A4. GY Irology Indicators ators (minimum of Vater (A1) er Table (A2)	aled organ	nic soil a	eck all that appl Water-Stai 1, 2, 4	y) ned Leaves A, and 4B)				Secon	ndary Inc ater-Sta 4A, an	dicators (ined Lea	(2 or more I	required)
Property of the control of the contr	e soil profile revea and A4. GY Irology Indicator ators (minimum of Vater (A1) er Table (A2) n (A3)	aled organ	nic soil a	eck all that appl Water-Stai 1, 2, 44	y) ned Leaves A, and 4B) (B11)	s (B9) (e			Secon Wi	ndary Inc ater-Sta 4A, an ainage F	dicators (ined Lea d 4B) Patterns	(<u>2 or more l</u> ives (B9) (N (B10)	required)
PROLOGICAL STATES AND	e soil profile revea and A4. GY Irology Indicator: ators (minimum of Vater (A1) er Table (A2) n (A3) arks (B1)	aled organ	nic soil a	eck all that appl Water-Stai 1, 2, 4,4 Salt Crust (Aquatic Inv	y) ned Leaves A, and 4B) (B11) rertebrates	s (B9) (e			Secon Wi	ndary Inc ater-Sta 4A, an ainage I y-Seasc	dicators (ined Lea id 4B) Patterns on Water	(2 or more 1 1ves (B9) (N (B10) Table (C2)	equired)
PROLOGICAL STATES AND	GY Irology Indicator ators (minimum of Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2)	aled organ	nic soil a	eck all that appl Water-Stai 1, 2, 44 Salt Crust (Aquatic Inv	y) ned Leaves A, and 4B) (B11) rertebrates Sulfide Odo	s (B9) (e (B13) or (C1)	xcept ML	RA	Secon Will Dr Dr Sa	ndary Inc ater-Sta 4A, an ainage I y-Seasc aturation	dicators (ined Lea id 4B) Patterns on Water Visible ((2 or more rowes (B9) (Normal) (B10) Table (C2) on Aerial Im	equired)
POROLOG Vetland Hyd Timary Indic Surface V High Wat Saturation Water Ma Sediment Drift Depo	e soil profile revea and A4. GY Irology Indicator ators (minimum of Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3)	aled organ	nic soil a	eck all that appl Water-Stai 1, 2, 44 Salt Crust o Aquatic Inv Hydrogen S Oxidized R	y) ned Leaves A, and 4B) (B11) rertebrates Sulfide Odo hizosphere	s (B9) (e (B13) or (C1) es along	xcept MLI	RA	Secon Wi Dr Dr Sa Gee	adary Inc ater-Sta 4A, an ainage I y-Seasc aturation eomorph	dicators (ined Lea d 4B) Patterns on Water Visible onic Position	(2 or more inves (B9) (No. (B10)) Table (C2) on Aerial Imon (D2)	equired) ILRA 1, 2
PROLOGICATION OF THE PROPERTY	e soil profile revea and A4. GY Irology Indicator ators (minimum of Vater (A1) er Table (A2) in (A3) arks (B1) it Deposits (B2) posits (B3) or Crust (B4)	aled organ	nic soil a	eck all that appl Water-Stai 1, 2, 44 Salt Crust Aquatic Inv Hydrogen S Oxidized R	y) ned Leaves A, and 4B) (B11) rertebrates Sulfide Odo hizosphere of Reduced	(B13) or (C1) es along Iron (C4	xcept ML	RA ots (C3)	Secon Wi Dr Dr Se Ge Sr	adary Inc ater-Sta 4A, an ainage I y-Seasc aturation eomorph nallow An	dicators (ined Lea d 4B) Patterns on Water Visible onic Positin quitard (l	(2 or more I aves (B9) (N (B10) Table (C2) on Aerial Im on (D2) D3)	equired)
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Property of the control of the contr	e soil profile revea and A4. GY Irology Indicator ators (minimum of 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 Aeria Vegetated Conca	s: f one requ	uired; ch	eck all that appl Water-Stain 1, 2, 44 Salt Crust of Aquatic Inv Hydrogen Solidized R Presence of Recent Iron Stunted or	y) ned Leaves A, and 4B) (B11) rertebrates Sulfide Odo hizosphere of Reduced in Reduction Stressed P	s (B9) (e (B13) or (C1) es along Iron (C4 n in Tillee	xcept MLI Living Roo	RA ots (C3)	Secon War Dr Dr Sa Ge Sr FA	adary Inc ater-Sta 4A, an ainage I y-Seasc aturation eomorph nallow A AC-Neutralised An	dicators (ined Lea d 4B) Patterns on Water Visible onic Positinguitard (I ral Test (in thousand the month of	(2 or more rates (2 or	required) ILRA 1, 2 nagery (C
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YDROLOG Vetland Hyd Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundatio Sparsely Sield Observ Surface Water	e soil profile revea and A4. GY Irology Indicator: ators (minimum of 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 Aeria Vegetated Conca Vations: er Present? Present?	s: f one required Surface Yes Yes Yes Yes	uired; ch	eck all that appl Water-Stair 1, 2, 44 Salt Crust of Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iror Stunted or Other (Exp	ned Leaves A, and 4B) (B11) Pertebrates Sulfide Odo hizosphere of Reduced n Reduction Stressed P lain in Rem	s (B9) (e (B13) or (C1) es along Iron (C4 n in Tiller Plants (D narks)	xcept MLi Living Roo I) d Soils (C6 1) (LRR A	RA (C3)	Secon Wi Dr Sa Ge Sh Ra Fre	adary Inc ater-Sta 4A, an ainage f y-Seasc aturation eomorph nallow Ar AC-Neutr aised An oost-Hear	dicators (ined Lea d 4B) Patterns on Water Visible onic Position (uitand (lital Test (lital Test (lital Mound ve Humn	(2 or more I Ives (B9) (Normal (B10) Table (C2) In Aerial Imon (D2) In (D5) In (D5) In (D6) (LRI In (D7)	required) ILRA 1, 2 nagery (C
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YDROLOG Vetland Hyd Surface V High Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely Field Observ Surface Water Vater Table I Saturation Pr includes cap Describe Reco	e soil profile revea and A4. GY Irology Indicator: ators (minimum of 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 Aeria Vegetated Conca vations: er Present? Present? esent? esent?	s: f one required Surface Yes \(\text{Yes} \) \end{Yes} \(\text{Yes} \(\text{Yes} \(\text{Yes} \(\text{Yes} \) \end{Yes} \(\text{Yes} \(\text{Yes} \(\text{Yes} \(\text{Yes} \) \end{Yes} \(\text{Yes} \(\text{Yes} \(\text{Yes} \) \end{Yes} \)	uired; ch (B7) Re (B8) No No No No No No No No No No	eck all that appl Water-Stai 1, 2, 44 Salt Crust of Aquatic Inv Hydrogen of Oxidized R Presence of Recent Iron Stunted or Other (Exp Depth (inchest	ned Leaves A, and 4B) (B11) rertebrates Sulfide Odo hizosphere of Reduced n Reduction Stressed P lain in Rem (S): (S): (0 in hole (S): (@ surface (S)): (@ surface (S)): (@ surface (S)): (D)	(B13) or (C1) es along Iron (C4 n in Tiller elants (D narks)	Living Roo l) d Soils (Ce 1) (LRR A	RA ots (C3) 6)	Secon W: Dr Dr Sa Ge St Ra Fre	adary Inc ater-Sta 4A, an ainage f y-Seasc aturation eomorph nallow Ar AC-Neutr aised An oost-Hear	dicators (ined Lea d 4B) Patterns on Water Visible onic Position (uitand (lital Test (lital Test (lital Mound ve Humn	(2 or more I Ives (B9) (Normal (B10) Table (C2) In Aerial Imon (D2) In (D5) In (D5) In (D6) (LRI In (D7)	required) ILRA 1, 2 nagery (C

Project/Site: Bond Road/SR 305		City/Coun	ty: <u>Poulsbo,</u>	Kitsap	Sampling Date: 11/2010 6-2016	
Applicant/Owner: Edward Rose and Sons				State: WA	Sampling Point: TH 7-	Α
Investigator(s): <u>J. Bartlett</u>						
Landform (hillslope, terrace, etc.): hillslope		_ Local reli	ief (concave	, convex, none): sloping	Slope (%)): <u>5%</u>
Subregion (LRR): MLRA 2	Lat:			Long:	Datum:	
Soil Map Unit Name: 41 Poulsbo gravelly sandy loam, 15-3						
Are climatic / hydrologic conditions on the site typical for th						
Are Vegetation, Soil, or Hydrology sig	-			ormal Circumstances" pres	ent? Yes⊠ No□	
Are Vegetation, Soil, or Hydrology nat				ed, explain any answers in		
SUMMARY OF FINDINGS – Attach site map					•	s, etc.
Hydrophytic Vegetation Present? Yes ☐ No ☒						
Hydric Soil Present? Yes ☐ No ☒			he Sampled hin a Wetlar		. 🖂	
Wetland Hydrology Present? Yes ☐ No ☒		Witi	illi a vvellai	ild: Tes 🗌 No		
Remarks: Upland area on east edge of property right alor	ng Bond Roa	ıd.				
VEGETATION – Use scientific names of plan	nts.					
Tree Stratum (Plot size: 30' diameter)	Absolute		t Indicator ? Status	Dominance Test works		
Alnus rubra		Yes		Number of Dominant Spe That Are OBL, FACW, or		(A)
Pseudotsuga menziesii						(7.1)
3. Frangula purshiana	•	Yes		Total Number of Domina Species Across All Strata		(B)
4.				,	<u> </u>	()
Sapling/Shrub Stratum (Plot size: 30' diameter)		= Total (Cover	Percent of Dominant Spe That Are OBL, FACW, or		(A/B)
1. Rubus spectabilis	<u>15%</u>	Yes	FAC	Prevalence Index works	sheet:	
Oemleria cerasiformis	15%	Yes	FACU	Total % Cover of:	Multiply by:	
3				OBL species		
4				FACW species		
5				FAC species		
Herb Stratum (Plot size: 30 feet)	30%	= Total (Cover	FACU species		
1. Rubus ursinus	25%	Yes	FACU	UPL species		
Polystichum munitum		Yes		Column Totals:	(A)	(D)
3.				Prevalence Index :	= B/A =	
4.				Hydrophytic Vegetation	n Indicators:	
5	_			☐ Dominance Test is >	50%	
6				☐ Prevalence Index is		
7		<u> </u>		Morphological Adapt	ations ¹ (Provide suppor or on a separate sheet	
8				☐ Wetland Non-Vascul		,
9				☐ Problematic Hydroph		iin)
10			·	¹ Indicators of hydric soil	, , ,	,
11				be present, unless distur		
Woody Vine Stratum (Plot size:)	45%	= Total (Cover			
1				Hydrophytic		
2.				Vegetation	_	
		= Total (Present? Yes	□ No ⊠	
% Bare Ground in Herb Stratum <u>55</u>		-				
Remarks: The hydrophytic vegetation criterion is not met	because the	re is less t	han 50% do	minance by FAC.		

Depth	cription: (Descrit Matrix		lepth n	eeded to document the indicator or on the Redox Features	confirm	the absence of indicators.)
(inches)	Color (moist)	%	Cole	or (moist) % Type ¹ L	oc²	Texture Remarks
0-3"	10YR 2/2	100%			<u> </u>	oam
3-16"	7.5YR 4/4	100%				sandy loam
	-				-	
	-					
¹Type: C=C	concentration, D=D	epletion, F	RM=Red	duced Matrix, CS=Covered or Coated S	and Gra	
Hydric Soil	Indicators: (App	licable to	all LRF	Rs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
Histosol	, ,			Sandy Redox (S5)		2 cm Muck (A10)
	oipedon (A2)			Stripped Matrix (S6)		Red Parent Material (TF2)
	istic (A3)			Loamy Mucky Mineral (F1) (except ML	.RA 1)	☐ Other (Explain in Remarks)
	en Sulfide (A4)	200 (011)		Loamy Gleyed Matrix (F2)		
	d Below Dark Surfa ark Surface (A12)	ace (ATT)		Depleted Matrix (F3) Redox Dark Surface (F6)		³ Indicators of hydrophytic vegetation and
	/lucky Mineral (S1)			Depleted Dark Surface (F7)		wetland hydrology must be present,
	Gleyed Matrix (S4)			Redox Depressions (F8)		unless disturbed or problematic.
Restrictive	Layer (if present)	:		, ,		·
Type:						
Depth (in	nches):					Hydric Soil Present? Yes ☐ No ⊠
Remarks: T	he hydric soil criter	ion is not r	net bec	cause of the high chroma of the soil prof	file.	
	,			ů ,		
HYDROLC	rdrology Indicator					
-	cators (minimum o		ired: ch	neck all that apply)		Secondary Indicators (2 or more required)
	Water (A1)			☐ Water-Stained Leaves (B9) (exce	nt MIRA	
	ater Table (A2)			1, 2, 4A, and 4B)	P.	4A, and 4B)
☐ Saturation				Salt Crust (B11)		☐ Drainage Patterns (B10)
_	larks (B1)			Aquatic Invertebrates (B13)		☐ Dry-Season Water Table (C2)
	nt Deposits (B2)			☐ Hydrogen Sulfide Odor (C1)		☐ Saturation Visible on Aerial Imagery (C9)
	posits (B3)			☐ Oxidized Rhizospheres along Livir	na Roots	
	at or Crust (B4)			☐ Presence of Reduced Iron (C4)	9	☐ Shallow Aguitard (D3)
•	oosits (B5)			☐ Recent Iron Reduction in Tilled Sc	oils (C6)	☐ FAC-Neutral Test (D5)
	Soil Cracks (B6)			☐ Stunted or Stressed Plants (D1) (I		Raised Ant Mounds (D6) (LRR A)
	on Visible on Aeria	l Imagery	(B7)	☐ Other (Explain in Remarks)	,	☐ Frost-Heave Hummocks (D7)
☐ Sparsely	y Vegetated Conca	ve Surface	e (B8)			
Field Obser	rvations:					
Surface Wa	ter Present?	Yes 🗌	No 🛛	Depth (inches):		
Water Table	Present?	Yes 🗌	No 🛛	Depth (inches):		
Saturation F		Yes 🗌	No 🖂	Depth (inches):	Wetla	nd Hydrology Present? Yes ☐ No ⊠
(includes ca	pillary fringe)					
Describe Re	ecorded Data (strea	am gauge,	monito	ring well, aerial photos, previous inspec	ctions), if	available:
Pamarka: N	o hydrology press	nt and no	votland	hydrology indicators		
iveillaiks. IV	o nyarology preser	it allu IIU V	velialiü	nyarology maicators		

Project/Site: Bond Road/SR 305	(City/Count	ty: <u>Poulsbo,</u>	Kitsap	Sampling Date: 11/2010 6-2016
Applicant/Owner: Edward Rose and Sons				State: WA	Sampling Point: TH 8-A
Investigator(s): <u>J. Bartlett</u>			Section, To	ownship, Range: <u>S 10 & 11</u>	, T 26 N, R 1E.
Landform (hillslope, terrace, etc.): hillslope		Local reli	ef (concave,	, convex, none): sloping	Slope (%): <u>5%</u>
Subregion (LRR): MLRA 2	_ Lat:			Long:	Datum:
Soil Map Unit Name: 40 Poulsbo gravelly sandy loam, 6-159					
Are climatic / hydrologic conditions on the site typical for this					
Are Vegetation, Soil, or Hydrology sign	-			ormal Circumstances" pres	ent? Yes ⊠ No □
Are Vegetation, Soil, or Hydrology natu	-			ed, explain any answers in	
SUMMARY OF FINDINGS - Attach site map					
Hydrophytic Vegetation Present? Yes ☐ No ☒					
Hydric Soil Present? Yes ☐ No ☒			he Sampled		. 🔽
Wetland Hydrology Present? Yes ☐ No ☒		Witi	nin a wetiar	nd? Yes ☐ No	O 🖂
Remarks: Upland area in southwestern portion of the site. used for this report because there have been no changes in 11/10 to reflag the test hole location. VEGETATION – Use scientific names of plant	to site condit	lulating te tions. Fla	rrain in conif gged as Tes	er forest community. Data at Hole 7-A in the field beca	collected in July 2006 and use flag was not located in
		Dominan	t Indicator	Dominance Test works	heet:
<u>Tree Stratum</u> (Plot size: <u>30' diameter</u>)	% Cover			Number of Dominant Spe	
1. Thuja plicata	35%	Yes	FAC	That Are OBL, FACW, or	r FAC: <u>1</u> (A)
Pseudotsuga menziesii				Total Number of Domina	nt
3. Acer macrophyllum	5%			Species Across All Strata	a: <u>4</u> (B)
4. Prunus emarginata	5%			Percent of Dominant Spe	
Sapling/Shrub Stratum (Plot size: 30' diameter)	60%	= lotal (Cover	That Are OBL, FACW, or	r FAC: <u>25</u> (A/B)
Vaccinium ovataum	5%	Yes	FACU	Prevalence Index works	sheet:
2.				Total % Cover of:	Multiply by:
3.				OBL species	x 1 =
4				FACW species	x 2 =
5				FAC species	x 3 =
	5%	= Total 0	Cover	FACU species	x 4 =
Herb Stratum (Plot size: 30 feet)	400/	V	E4011	UPL species	
1. Polystichum munitum				Column Totals:	(A) (B)
2				Prevalence Index :	= B/A =
3				Hydrophytic Vegetation	
5				☐ Dominance Test is >	
6				☐ Prevalence Index is	3.0 ¹
7				☐ Morphological Adapt data in Remarks	ations ¹ (Provide supporting or on a separate sheet)
8				☐ Wetland Non-Vascul	ar Plants ¹
9				☐ Problematic Hydroph	nytic Vegetation ¹ (Explain)
10				¹ Indicators of hydric soil abe present, unless distur	and wetland hydrology must bed or problematic.
Woody Vine Stratum (Plot size:)	10%			, , , , , , , , , , , , , , , , , , , ,	
1				Hydrophytic Vegetation	
2					□ No ⊠
% Bare Ground in Herb Stratum 90%		= Total (Cover		
Remarks: The hydrophytic vegetataion criterion is not met	because the	re is less	than 50% de	ominance by FAC species.	

Profile Desc	cription: (Describ	e to the d	epth ne	eded to docu	ment the	indicator	or confirn	n the al	sence of indicators.)
Depth	Matrix				x Feature				
(inches)	Color (moist)	%	Colo	r (moist)	%	Type ¹	Loc ²	Textu	re Remarks
<u>0-16"</u>	10YR 5/3	100%						gr sa l	oa
		_							
· 	_								
					_			-	
·					_				· · · · · · · · · · · · · · · · · · ·
	oncentration, D=De						ed Sand G		² Location: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Appl	icable to a	III LRR	s, unless othe	rwise not	ed.)		l	ndicators for Problematic Hydric Soils ³ :
☐ Histosol	, ,			Sandy Redox (S5)				☐ 2 cm Muck (A10)
-	ipedon (A2)			Stripped Matrix	, ,				Red Parent Material (TF2)
☐ Black His				oamy Mucky N			MLRA 1)		Other (Explain in Remarks)
_ , _	n Sulfide (A4)			oamy Gleyed	•)			
	Below Dark Surfa	ce (A11)		Depleted Matrix				3	
	rk Surface (A12)			Redox Dark Su	` ,			3	Indicators of hydrophytic vegetation and
-	lucky Mineral (S1)			Depleted Dark	`	7)			wetland hydrology must be present,
	leyed Matrix (S4)		∐ F	Redox Depress	ions (F8)				unless disturbed or problematic.
	Layer (if present):								
Type:			_						
Depth (in	,		_						ric Soil Present? Yes ☐ No ☒
Remarks: Hi	gh soil matrix chro	ma does n	ot have	characteristics	for any of	the hydri	c soil indic	ators.	
									
HYDROLO									
Wetland Hy	drology Indicator	s:							
Primary India	cators (minimum of	one requi	red; che	eck all that app	ly)				Secondary Indicators (2 or more required)
☐ Surface \	Water (A1)			☐ Water-Sta	ined Leave	es (B9) (e :	xcept MLF	RA	☐ Water-Stained Leaves (B9) (MLRA 1, 2,
☐ High Wa	ter Table (A2)			1, 2, 4	A, and 4B)			4A, and 4B)
☐ Saturation	on (A3)			☐ Salt Crust	(B11)				☐ Drainage Patterns (B10)
☐ Water M	arks (B1)			☐ Aquatic In	vertebrate	s (B13)			☐ Dry-Season Water Table (C2)
☐ Sedimen	t Deposits (B2)			☐ Hydrogen	Sulfide Od	dor (C1)			☐ Saturation Visible on Aerial Imagery (C9)
☐ Drift Dep	osits (B3)			☐ Oxidized F	Rhizosphe	res along	Living Roc	ts (C3)	☐ Geomorphic Position (D2)
-	t or Crust (B4)			☐ Presence	of Reduce	d Iron (C4	ł)	. ,	☐ Shallow Aquitard (D3)
_	osits (B5)			☐ Recent Iro				5)	FAC-Neutral Test (D5)
-	Soil Cracks (B6)			☐ Stunted or			,	,	Raised Ant Mounds (D6) (LRR A)
	on Visible on Aerial	Imagery (B7)	☐ Other (Exp			, (•	☐ Frost-Heave Hummocks (D7)
	Vegetated Concar					,			
Field Obser			()						
Surface Wat		Yes □	No 🖂	Depth (inche	s).				
Water Table			No 🏻	Depth (inche					
							18/11		whater Breeze (O. Ver D. Ne M.
Saturation P (includes car		Yes 🗌	No 🛛	Depth (inche	s):		weti	and Hy	drology Present? Yes ☐ No ⊠
	corded Data (strea	m gauge.	monitori	ing well, aerial	photos, pr	evious ins	spections).	if availa	able:
		5 - 5 - 7		J ,	/[//		
Remarks: No	hvdrology presen	t and no w	etland h	vdrology indic	ators were	ohserver	l in this are	a durin	g any of the field visits.
rtomants. INC	o nyararay presen	t and HU W	ouanu I	iyarology iridic	aiois WEIE	, 00351750	ani uno alt	o uunin	g any of the hold violes.

Project/Site: Bond Road/SR 305	City/County: Poulsbo, Kitsap Sampling Date: 11/					
Applicant/Owner: Edward Rose and Sons				State: WA	Sampling Point: TH 9-A	
Investigator(s): <u>J. Bartlett</u>			Section, To	ownship, Range: <u>S 10 & 11</u>	, T 26 N, R 1E.	
Landform (hillslope, terrace, etc.): hillslope		Local relie	ef (concave,	convex, none): sloping	Slope (%): <u>5%</u>	
Subregion (LRR): MLRA 2	_ Lat:			Long:	Datum:	
Soil Map Unit Name: 40 Poulsbo gravelly sandy loam, 6-15						
Are climatic / hydrologic conditions on the site typical for this						
Are Vegetation, Soil, or Hydrology sign	-			ormal Circumstances" pres	ent? Yes ⊠ No □	
Are Vegetation, Soil, or Hydrology natu				ed, explain any answers in		
SUMMARY OF FINDINGS – Attach site map			,		,	
Hydrophytic Vegetation Present? Yes ⊠ No □						
Hydric Soil Present? Yes ☐ No ☒			e Sampled		_	
Wetland Hydrology Present? Yes ☐ No ☒		with	in a Wetlar	nd? Yes ☐ No) <u> </u>	
Remarks: Upland area in southwestern portion of the site.						
used for this report because there have been no change to 11/10 to reflag the test hole location. NW of Test Hole 8-A.		ions. Flagg	jed as Test	Hole 8-A in the field becau	ise flag was not located in	
The to rolling the test halo lessales. The stricts of the						
VEGETATION . Has as 's we'll a server of a lawy						
VEGETATION – Use scientific names of plan						
Tree Stratum (Plot size: 30' diameter)	% Cover	Dominant Species?		Dominance Test works		
1. Thuja plicata		Yes		Number of Dominant Sports Are OBL, FACW, or		
Pseudotsuga menziesii		Yes	FACU	Total Number of Domina		
3				Species Across All Strata		
4						
	20%	= Total C	over	Percent of Dominant Spe That Are OBL, FACW, or	r FAC: <u>25</u> (A/B)	
Sapling/Shrub Stratum (Plot size: 30' diameter)	5 0/		E4.011	Prevalence Index work	-ah aat	
Vaccinium ovataum Coulthoria aballan		Yes			Multiply by:	
2. Gaultheria shallon		Yes			x 1 =	
3					x 2 =	
5					x 3 =	
		= Total C			x 4 =	
Herb Stratum (Plot size: 30 feet)				UPL species	x 5 =	
1				Column Totals:	(A) (B)	
2				Dunyalan sa la day	D/A	
3				Hydrophytic Vegetation	= B/A =	
4				Dominance Test is >		
5				☐ Prevalence Index is		
6				_	tations ¹ (Provide supporting	
7 8					or on a separate sheet)	
9.				☐ Wetland Non-Vascul		
10					nytic Vegetation ¹ (Explain)	
11.				¹ Indicators of hydric soil be present, unless distur	and wetland hydrology must	
		= Total C		be present, unless distar	bed of problematic.	
Woody Vine Stratum (Plot size:)						
1				Hydrophytic Vegetation		
2					□ No ⊠	
% Bare Ground in Herb Stratum 100%		= Total C	over			
Remarks: The hydrophytic vegetation criterion is not met b	ecause ther	re is less th	an 50% doi	minance by FAC.		

Depth (inches)	Matrix Color (moist)	%	Colo	Redox Features or (moist) % Type ¹ Lo	c ² Texti	ure	Remarks
0-16"	10YR 4/3	100%		// ///	grsa		
<u>J-10</u>	101 K 4/3	100%			<u>yı sa</u>	10a	
	-	_					-
		_	_				
							_
	_						_
			_				
Type: C=C	oncentration. D=De	pletion. F	RM=Red	luced Matrix, CS=Covered or Coated Sa	and Grains.	² Loc	cation: PL=Pore Lining, M=Matrix.
				s, unless otherwise noted.)			rs for Problematic Hydric Soils ³ :
☐ Histosol				Sandy Redox (S5)	[2 cm	Muck (A10)
	ipedon (A2)			Stripped Matrix (S6)			Parent Material (TF2)
☐ Black His	stic (A3)		□ I	Loamy Mucky Mineral (F1) (except MLI	RA 1) [Othe	r (Explain in Remarks)
☐ Hydroge	n Sulfide (A4)		□ I	Loamy Gleyed Matrix (F2)			
	Below Dark Surfac	ce (A11)		Depleted Matrix (F3)			
	rk Surface (A12)			Redox Dark Surface (F6)	3		ors of hydrophytic vegetation and
	lucky Mineral (S1)			Depleted Dark Surface (F7)			nd hydrology must be present,
•	leyed Matrix (S4)			Redox Depressions (F8)		unles	s disturbed or problematic.
	Layer (if present):						
Type:							
	chac).				Hvd		Present? Yes ☐ No ☒
Depth (in						ric Soii	Tresent: Tes No
				ause of the high chroma of the soil profi		ILIC 2011	Tresont. Tes Ne
				ause of the high chroma of the soil profi		ric Soii	resent. Tes ne Z
Remarks: Th	ne hydric soil criterio	on is not r		ause of the high chroma of the soil profi		ric Soil	resent. Tes ne Z
Remarks: Th	ne hydric soil criterio	on is not r		ause of the high chroma of the soil profi		ric Soil	resent. Tes ne Z
Remarks: The state of the state	ne hydric soil criterio	on is not r	met beca	eck all that apply)	le.		ndary Indicators (2 or more required)
Remarks: The state of the state	GY drology Indicators cators (minimum of	on is not r	met beca		le.	Secon	
Remarks: The state of the state	GY drology Indicators cators (minimum of	on is not r	met beca	eck all that apply)	le.	Secon	ndary Indicators (2 or more required)
YDROLO Wetland Hyd Primary India Surface V High Wa Saturatio	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3)	on is not r	met beca	eck all that apply) Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) Salt Crust (B11)	le.	Secor W	ndary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10)
Remarks: The second of the sec	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3)	on is not r	met beca	eck all that apply) Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B)	le.	Secor W	ndary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Remarks: The second of the sec	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3)	on is not r	met beca	eck all that apply) Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) Salt Crust (B11)	le.	Secon W	ndary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10)
IYDROLO Wetland Hydeliand Hydeliand High Water Mater	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1)	on is not r	met beca	eck all that apply) Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13)	ot MLRA	Secon W	ndary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2)
IYDROLO Wetland Hydeliand	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2)	on is not r	met beca	eck all that apply) Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	ot MLRA	Secon W Dr Dr Sa Ge	ndary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9)
IYDROLO Wetland Hydelican Surface Verimary India	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) oosits (B3)	on is not r	met beca	eck all that apply) Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin	ot MLRA	Secon W	adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2)
IYDROLO Wetland Hy Primary India Surface High Wa Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Dep	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4)	on is not r	met beca	eck all that apply) Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4)	g Roots (C3)	Secor W	ndary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) nallow Aquitard (D3)
IYDROLO Wetland Hy Primary Indic Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface	GY drology Indicators eators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) oosits (B3) t or Crust (B4) oosits (B5)	on is not r	met beca	eck all that apply) Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi	g Roots (C3)	Secon W. Dr Dr Sa GG St St Ra	ndary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) nallow Aquitard (D3) AC-Neutral Test (D5)
Remarks: The IYDROLO Wetland Hyde Primary India Surface Water March Marc	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6)	on is not r	ired; che	eck all that apply) Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Stunted or Stressed Plants (D1) (L	g Roots (C3)	Secon W. Dr Dr Sa GG St St Ra	adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Remarks: The Sediment Drift Dep Loron Dep Surface Surf	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial	on is not r	ired; che	eck all that apply) Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Stunted or Stressed Plants (D1) (L	g Roots (C3)	Secon W. Dr Dr Sa GG St St Ra	adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Remarks: The IYDROLO Wetland Hyde Primary India Surface Water March Ma	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial vegetated Concav vations:	on is not r	ired; che	eck all that apply) Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soit Stunted or Stressed Plants (D1) (L	g Roots (C3)	Secon W. Dr Dr Sa GG St St Ra	adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Remarks: The Sediment of Surface	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial vegetated Concav vations: er Present?	on is not r	ired; che (B7) e (B8)	eck all that apply) Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Stunted or Stressed Plants (D1) (L	g Roots (C3)	Secon W. Dr Dr Sa GG St St Ra	ndary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) nallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Remarks: The IYDROLO Wetland Hyde Primary India Surface Water March Marc	GY drology Indicators eators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial of Vegetated Concav vations: er Present?	Imagery Yes Yes	ired; che (B7) e (B8) No 🏻	eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Stunted or Stressed Plants (D1) (L Other (Explain in Remarks) Depth (inches): Depth (inches):	g Roots (C3)	Secon W Dr Dr Sa Ge St FA	adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) nallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
Remarks: Tr	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial vegetated Concav vations: er Present? Present? resent?	Imagery Yes Yes Yes Yes Yes Yes Yes Yes	ired; che (B7) e (B8) No 🖂 No 🖂	eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Stunted or Stressed Plants (D1) (L Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches):	g Roots (C3) ils (C6) RR A) Wetland Hy	Secor W Dr Dr Sa GG St Ra FA	ndary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) nallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Remarks: The Sediment of Surface	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial vegetated Concav vations: er Present? Present? resent?	Imagery Yes Yes Yes Yes Yes Yes Yes Yes	ired; che (B7) e (B8) No 🖂 No 🖂	eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Stunted or Stressed Plants (D1) (L Other (Explain in Remarks) Depth (inches): Depth (inches):	g Roots (C3) ils (C6) RR A) Wetland Hy	Secor W Dr Dr Sa GG St Ra FA	adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) nallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
Remarks: Tr	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial vegetated Concav vations: er Present? Present? resent?	Imagery Yes Yes Yes Yes Yes Yes Yes Yes	ired; che (B7) e (B8) No 🖂 No 🖂	eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Stunted or Stressed Plants (D1) (L Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches):	g Roots (C3) ils (C6) RR A) Wetland Hy	Secor W Dr Dr Sa GG St Ra FA	adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) nallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
Remarks: The Sediment Surface Water Malgal M	GY drology Indicators eators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial vegetated Concav vations: er Present? Present? resent? pillary fringe) corded Data (strear	Imagery re Surface Yes Yes Yes Yes Yes The gauge,	ired; che (B7) e (B8) No 🏻 No 🖎 no notor	eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Stunted or Stressed Plants (D1) (L Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches):	g Roots (C3) ils (C6) RR A) Wetland Hy	Secor W Dr Dr Sa GG St Ra FA	adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) nallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
Remarks: The Primary India Surface Water Magal Ma Iron Dep Surface Surface Surface Surface Water Table Saturation P (includes caped on the primary India Sparsely Surface Water Table Saturation P (includes caped on the primary India Sparsely Surface Water Table Saturation P (includes caped on the primary India Sparsely Surface Water Table Saturation P (includes caped on the primary India Sparsely Saturation P (includes caped on the primary India Sparsely India Sparsel	GY drology Indicators eators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial vegetated Concav vations: er Present? Present? resent? pillary fringe) corded Data (strear	Imagery re Surface Yes Yes Yes Yes Yes The gauge,	ired; che (B7) e (B8) No 🏻 No 🖎 no notor	eck all that apply) Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Stunted or Stressed Plants (D1) (L Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): Depth (inches):	g Roots (C3) ils (C6) RR A) Wetland Hy	Secor W Dr Dr Sa GG St Ra FA	adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) nallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
Remarks: The Sediment of Surface	GY drology Indicators eators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial vegetated Concav vations: er Present? Present? resent? pillary fringe) corded Data (strear	Imagery re Surface Yes Yes Yes Yes Yes The gauge,	ired; che (B7) e (B8) No 🏻 No 🖎 no notor	eck all that apply) Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Stunted or Stressed Plants (D1) (L Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): Depth (inches):	g Roots (C3) ils (C6) RR A) Wetland Hy	Secor W Dr Dr Sa GG St Ra FA	adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) nallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)

Project/Site: Bond Road/SR 305	(City/County	Sampling Date: 11/2010 6-2016			
Applicant/Owner: Edward Rose and Sons				State: WA	Sampling Point: TH 10-A	
Investigator(s): <u>J. Bartlett</u>			Section, To	ownship, Range: <u>S 10 & 11</u>	, T 26 N, R 1E.	
Landform (hillslope, terrace, etc.): hillslope		Local relie	f (concave,	, convex, none): sloping	Slope (%): <u>5%</u>	
Subregion (LRR): <u>NW Forests and Coast</u>	_ Lat:			Long:	Datum:	
Soil Map Unit Name: 41 Poulsbo gravelly sandy loam, 15-30						
Are climatic / hydrologic conditions on the site typical for this						
Are Vegetation, Soil, or Hydrology sign	-			ormal Circumstances" pres	ent? Yes⊠ No□	
Are Vegetation, Soil, or Hydrology natu	-			ed, explain any answers in		
SUMMARY OF FINDINGS – Attach site map s						
			<u> </u>	· · · · ·		
Hydrophytic Vegetation Present? Yes ☐ No ☐		Is th	e Sampled	l Area		
Hydric Soil Present? Yes ☐ No ☐ Wetland Hydrology Present? Yes ☐ No ☐		with	in a Wetlar	nd? Yes ☐ No	$oxed{oxed}$	
Remarks: Upper end of dry trough in which Test Holes 4A	and 5A were	e also esta	blished.			
, , ,						
VEGETATION – Use scientific names of plant	s.					
T. O. (D. (D.)		Dominant		Dominance Test works	heet:	
Tree Stratum (Plot size: 30' diameter)	% Cover			Number of Dominant Spe		
Alnus rubra Thuja plicata	15%			That Are OBL, FACW, or	r FAC: <u>2</u> (A)	
3				Total Number of Domina Species Across All Strata		
4						
Sapling/Shrub Stratum (Plot size: 30' diameter)		= Total C		Percent of Dominant Spe That Are OBL, FACW, or		
1. Vaccinium ovatum	5%	Yes	FACU	Prevalence Index works	sheet:	
2				Total % Cover of:	Multiply by:	
3				OBL species	x 1 =	
4				FACW species	x 2 =	
5					x 3 =	
Herb Stratum (Plot size: 30 feet)	5%	= Total C	over		x 4 = <u>220</u>	
·	50%	Yes	FACU		x 5 =	
2				Column Totals:	(A) (B)	
3				Prevalence Index :	= B/A =	
4				Hydrophytic Vegetation	n Indicators:	
5				☐ Dominance Test is >	50%	
6				Prevalence Index is		
7					ations ¹ (Provide supporting or on a separate sheet)	
8				☐ Wetland Non-Vascul		
9				☐ Problematic Hydroph	nytic Vegetation ¹ (Explain)	
10				• .	and wetland hydrology must	
11				be present, unless distur	bed or problematic.	
Woody Vine Stratum (Plot size:)	50%	= Total C	over			
1	-			Hydrophytic		
2				Vegetation Present? Yes	□ No ⊠	
8 B 8 B 8 B 8 B 8 B 8 B 8 B 8 B 8 B 8 B	= Total Cover			Present? Yes □ No ☑		
% Bare Ground in Herb Stratum <u>50</u> Remarks: The hydrophytic vegetation criterion is not met b	acallea thor	a is no are	ater than E	0% dominance by EAC and	acies	
Tromains. The hydrophytic vegetation chieffort is flot filet b	ccause inel	c is no gre	ater triair 30	570 dominance by FAC Spe	olog.	

	cription: (Descril	oe to the d	epth n				or confirr	n the absence of indicators.)
Depth (inches)	Matrix Color (moist)	<u>.</u> %	Cole	Redo or (moist)	x Feature: %		Loc ²	Texture Remarks
				<u>, , , , , , , , , , , , , , , , , , , </u>			LOC	
0-9"	10YR 2/2	100%						loam
9-16"	10YR 4/3	<u>100%</u>			_			gr sa loam
								- <u></u>
	-				1		-	
						· ——		
	oncentration, D=D						ed Sand G	
-	Indicators: (App	licable to				ed.)		Indicators for Problematic Hydric Soils ³ :
Histosol	` '			Sandy Redox (S				2 cm Muck (A10)
☐ Histic Ep				Stripped Matrix	` '	\	MIDA 4	Red Parent Material (TF2)
☐ Black His	n Sulfide (A4)			Loamy Mucky N Loamy Gleyed I			(WILKA 1)	☐ Other (Explain in Remarks)
_ , ,	d Below Dark Surfa	ace (A11)		Depleted Matrix				
	ark Surface (A12)	200 (7111)		Redox Dark Su	, ,			³ Indicators of hydrophytic vegetation and
_	lucky Mineral (S1)			Depleted Dark		7)		wetland hydrology must be present,
☐ Sandy G	leyed Matrix (S4)			Redox Depress	ions (F8)			unless disturbed or problematic.
Restrictive	Layer (if present)):						
Type:			_					
Depth (in	ches):		_					Hydric Soil Present? Yes ☐ No ☒
Remarks: Th	ne hydric soil criter	ion is not n	net bec	ause of the high	n chroma c	of the soil	profile.	
HYDROLO	CV							
	drology Indicator							
_	cators (minimum c		rad: ab	ook all that ann	h.A			Secondary Indicators (2 or more required)
		one requi	rea, cn			- (DO) (-	was not MI I	
☐ Surface	ter Table (A2)			☐ Water-Stai			xcept will	RA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☐ Saturation	` ,			I, Z, 4/	A, and 4B)	,		☐ Drainage Patterns (B10)
☐ Water M	` '			☐ Aquatic Inv	` '	(R13)		☐ Dry-Season Water Table (C2)
	nt Deposits (B2)			☐ Hydrogen		` '		☐ Saturation Visible on Aerial Imagery (C9)
	osits (B3)			☐ Oxidized F			Living Poo	
-	it or Crust (B4)			☐ Presence		_	•	Shallow Aquitard (D3)
	osits (B5)			☐ Recent Iro		`	,	_ ` ` ` `
-	Soil Cracks (B6)			☐ Stunted or				· · ·
	on Visible on Aeria	al Imagery (B7)	☐ Other (Exp			., (=:::::	Frost-Heave Hummocks (D7)
	Vegetated Conca		. ,			,		,
Field Obser								
Surface Wat	er Present?	Yes 🗌	No 🛛	Depth (inches	s):			
Water Table	Present?		No 🖂	Depth (inches	s):			
Saturation P			No 🖾	Depth (inches			Wet	land Hydrology Present? Yes ☐ No ⊠
(includes cap	oillary fringe)							
Describe Re	corded Data (stream	am gauge,	monito	ring well, aerial	photos, pr	evious in	spections),	if available:
Remarks: No	o hydrology presei	nt and no w	etland	hydrology indic	ators were	observe	d during th	e field visits.

Project/Site: Bond Road/SR 305		City/Cou	Sampling Date: 11/2010 6-2016			
Applicant/Owner: Edward Rose and Sons				State: WA	Sampling Point: TH 11-A	
Investigator(s): <u>J. Bartlett</u>			Section, To	ownship, Range: <u>S 10 & 11</u>	, T 26 N, R 1E.	
Landform (hillslope, terrace, etc.): Terrace						
Subregion (LRR): MLRA 2						
Soil Map Unit Name: 40 Poulsbo gravelly sandy loam, 6-15						
Are climatic / hydrologic conditions on the site typical for this					<u> </u>	
Are Vegetation, Soil, or Hydrology sign	•		,	ormal Circumstances" pres	ent? Yes⊠ No□	
Are Vegetation, Soil, or Hydrology natu				ed, explain any answers in	- -	
SUMMARY OF FINDINGS – Attach site map						
Lhydrophytic Vogetstien Brosent?						
Hydrophytic Vegetation Present? Yes ☐ No ☒ Hydric Soil Present? Yes ☐ No ☒			s the Sampled			
Wetland Hydrology Present? Yes ☐ No ☒		W	rithin a Wetlar	nd? Yes ☐ No	0 🛚	
Remarks: Upland area in central eastern portion of the promaple, red alder, western red cedar, cascara, Scouler's whave been no changes to site conditions. VEGETATION – Use scientific names of plan	illow and wil					
- Committee of plant		Domin	ant Indicator	Dominance Test works	sheet:	
Tree Stratum (Plot size: 30' diameter)			es? Status	Number of Dominant Sp	ecies	
1. Alnus rubra			<u>FAC</u>	That Are OBL, FACW, o	r FAC: 2 (A)	
2. Thuja plicata			<u>FAC</u>	Total Number of Domina	nt	
3. Frangula purshiana			<u>FAC</u>	Species Across All Strate	a: <u>5</u> (B)	
4. Acer macrophyllum	5%			Percent of Dominant Spo	ecies	
Sapling/Shrub Stratum (Plot size: 30' diameter)	40%	= lota	al Cover	That Are OBL, FACW, o	r FAC: <u>40%</u> (A/B)	
1. Oemleria cerasiformis	5%	Yes	FACU	Prevalence Index work	sheet:	
2. Sambucus racemosa			FACU	Total % Cover of:	Multiply by:	
3				OBL species	x 1 =	
4				FACW species	x 2 =	
5				FAC species	x 3 =	
Harle Christians (Plat since 20 feet)	10%	= Tota	al Cover		x 4 =	
Herb Stratum (Plot size: 30 feet)	50%	Voo	FACIL	UPL species		
Polystichum munitum Rubus ursinus	10%			Column Totals:	(A) (B)	
3				Prevalence Index	= B/A =	
4				Hydrophytic Vegetation	n Indicators:	
5.				☐ Dominance Test is >	-50%	
6				☐ Prevalence Index is	3.0 ¹	
7 8					tations ¹ (Provide supporting or on a separate sheet)	
9.				☐ Wetland Non-Vascul	ar Plants ¹	
10					nytic Vegetation ¹ (Explain)	
11				¹ Indicators of hydric soil be present, unless distu	and wetland hydrology must	
Woody Vine Stratum (Plot size:)	60%		al Cover	be present, unless distu	bed of problematic.	
1				Hydrophytic		
2				Vegetation		
			al Cover	Present? Yes □ No ☒		
% Bare Ground in Herb Stratum 40						
Remarks: The hydrophytic vegetation criterion is not met be	because the	ie is ies	s (nan 50% do	пшпапсе ву FAC.		

Depth	Matrix	%	Color (moist)	edox Features	Loc ²	Texture	Domorko
(inches)	Color (moist)		Color (moist)	<u>%</u> <u>Type'</u>			Remarks
<u>0-16"</u>	10YR 4/4	100%			g	r sa loa	
	-		•	· · · · · · · · · · · · · · · · · · ·			_
			-				
			-				
1= 0.0						21	
				CS=Covered or Coa	ited Sand Grai		tion: PL=Pore Lining, M=Matrix. s for Problematic Hydric Soils ³ :
-	Indicators: (Appl	icable to a					•
Histosol	, ,		Sandy Redox				Muck (A10)
☐ Black Hi	oipedon (A2)		Stripped Mat	rıx (56) y Mineral (F1) (exce j	of MLPA 1)		arent Material (TF2) (Explain in Remarks)
	en Sulfide (A4)		Loamy Gleye		OLIVIERA I)	☐ Other	(Explain in Remarks)
	d Below Dark Surfa	ce (A11)	☐ Depleted Ma	, ,			
	ark Surface (A12)	(7111)	☐ Redox Dark	` '		³ Indicators	of hydrophytic vegetation and
	fucky Mineral (S1)			k Surface (F7)			hydrology must be present,
☐ Sandy G	Bleyed Matrix (S4)		☐ Redox Depre				disturbed or problematic.
Restrictive	Layer (if present):						
Type:			_				
	ches):					Hydric Soil P	resent? Yes ☐ No ⊠
	, -		- et hecause of the h	igh chroma of the so	il profile		
	,						
HYDROLO	GY						
Wetland Hy	drology Indicators	s:					
Primary Indi	cators (minimum of	f one require	ed: check all that a	(vlaa		Second	ary Indicators (2 or more required)
☐ Surface				stained Leaves (B9) (excent MI RA		er-Stained Leaves (B9) (MLRA 1, 2,
	iter Table (A2)			4A, and 4B)			Ci Otaliica Ecaves (DS) (MEICA 1, 2,
_	iter rable (/ iz)		1 2				
Saturation	on (A3)					•	4A, and 4B)
□ Water M	on (A3) Jarks (B1)		☐ Salt Cru	st (B11)	•	□ Drai	4A, and 4B) nage Patterns (B10)
☐ Water M	larks (B1)		☐ Salt Cru ☐ Aquatic	st (B11) Invertebrates (B13)		☐ Drai ☐ Dry-	4A, and 4B) nage Patterns (B10) Season Water Table (C2)
Sedimer	arks (B1) nt Deposits (B2)		☐ Salt Cru ☐ Aquatic ☐ Hydroge	st (B11) Invertebrates (B13) en Sulfide Odor (C1)		☐ Drai ☐ Dry- ☐ Satu	4A, and 4B) nage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (C9)
☐ Sedimer☐ Drift Dep	arks (B1) nt Deposits (B2) posits (B3)		☐ Salt Cru ☐ Aquatic ☐ Hydroge ☐ Oxidize	st (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres along	g Living Roots	☐ Drai ☐ Dry- ☐ Satu (C3) ☐ Geo	AA, and 4B) inage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (C9) emorphic Position (D2)
☐ Sedimer☐ Drift Dep☐ Algal Ma	arks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)		☐ Salt Cru ☐ Aquatic ☐ Hydroge ☐ Oxidize	st (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres along e of Reduced Iron (C	g Living Roots 24)	Drai Dry- Satu (C3) Geo	AA, and 4B) Inage Patterns (B10) Season Water Table (C2) Uration Visible on Aerial Imagery (C9) Omorphic Position (D2) Illow Aquitard (D3)
☐ Sedimer☐ Drift Dep☐ Algal Ma☐ Iron Dep	arks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5)		☐ Salt Cru ☐ Aquatic ☐ Hydrogo ☐ Oxidize ☐ Preseno ☐ Recent	st (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres along e of Reduced Iron (C Iron Reduction in Till	g Living Roots C4) ed Soils (C6)	☐ Drai ☐ Dry- ☐ Satu (C3) ☐ Geo ☐ Sha	4A, and 4B) Inage Patterns (B10) Season Water Table (C2) Furation Visible on Aerial Imagery (C9) Furnorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5)
☐ Sedimer ☐ Drift Dep ☐ Algal Ma ☐ Iron Dep ☐ Surface	arks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6)	Umagan (F	☐ Salt Cru ☐ Aquatic ☐ Hydroge ☐ Oxidize ☐ Presence ☐ Recent ☐ Stunted	st (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres along ee of Reduced Iron (C Iron Reduction in Till or Stressed Plants (I	g Living Roots C4) ed Soils (C6)	☐ Drai ☐ Dry- ☐ Satu (C3) ☐ Geo ☐ Sha ☐ FAC	AA, and 4B) inage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (C9) imorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A)
Sedimer Drift Dep Algal Ma Iron Dep Surface Inundation	arks (B1) Int Deposits (B2) Posits (B3) Int or Crust (B4) Posits (B5) Soil Cracks (B6) Int on Visible on Aerial	0 , (Salt Cru Aquatic Hydroge Oxidizee Presence Recent Stunted	st (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres along e of Reduced Iron (C Iron Reduction in Till	g Living Roots C4) ed Soils (C6)	☐ Drai ☐ Dry- ☐ Satu (C3) ☐ Geo ☐ Sha ☐ FAC	4A, and 4B) Inage Patterns (B10) Season Water Table (C2) Furation Visible on Aerial Imagery (C9) Furnorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5)
Sedimer Drift Dep Algal Ma Iron Dep Surface Inundation Sparsely	arks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial v Vegetated Concav	0 , (Salt Cru Aquatic Hydroge Oxidizee Presence Recent Stunted	st (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres along ee of Reduced Iron (C Iron Reduction in Till or Stressed Plants (I	g Living Roots C4) ed Soils (C6)	☐ Drai ☐ Dry- ☐ Satu (C3) ☐ Geo ☐ Sha ☐ FAC	AA, and 4B) inage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (C9) imorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A)
Sedimer Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely	arks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial vegetated Concaverations:	ve Surface	Salt Cru Aquatic Hydroge Oxidize Presence Recent Stunted The Common Structure (B8)	st (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres along e of Reduced Iron (C Iron Reduction in Till or Stressed Plants (I explain in Remarks)	g Living Roots C4) ed Soils (C6)	☐ Drai ☐ Dry- ☐ Satu (C3) ☐ Geo ☐ Sha ☐ FAC	AA, and 4B) inage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (C9) imorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A)
Sedimer Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Wat	arks (B1) Int Deposits (B2) Posits (B3) Int or Crust (B4) Posits (B5) Soil Cracks (B6) Int or Crust (B4) Posits (B5) Soil Cracks (B6) Int or Crust (B4) Int	ve Surface	Salt Cru Aquatic Hydroge Oxidize Presenc Recent Stunted The Company of the Compan	st (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres along te of Reduced Iron (C Iron Reduction in Till or Stressed Plants (I Explain in Remarks)	g Living Roots C4) ed Soils (C6)	☐ Drai ☐ Dry- ☐ Satu (C3) ☐ Geo ☐ Sha ☐ FAC	AA, and 4B) inage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (C9) imorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A)
Sedimer Drift Dep Algal Ma Iron Dep Surface Inundation Sparsely Field Obser Surface Wat Water Table	arks (B1) Int Deposits (B2) Dosits (B3) Int or Crust (B4) Dosits (B5) Soil Cracks (B6) Int or Crust (B4) Dosits (B5) Soil Cracks (B6) Int or Crust (B4) Dosits (B5) Soil Cracks (B6) Don Visible on Aerial Dove Vegetated Concaverations: The Present?	ve Surface Yes	Salt Cru Aquatic Hydroge Oxidize Presence Recent Stunted S7) Other (E	st (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres along ee of Reduced Iron (C Iron Reduction in Till or Stressed Plants (I explain in Remarks) enes):	g Living Roots C4) ed Soils (C6) D1) (LRR A)	☐ Drai ☐ Dry- ☐ Satu (C3) ☐ Geo ☐ Sha ☐ FAC ☐ Rais ☐ Fros	AA, and 4B) Inage Patterns (B10) Inage Patterns (C2) Inage Pat
Sedimer Drift Dep Algal Ma Iron Dep Surface Inundation Sparsely Field Obser Surface Wat Water Table Saturation P	arks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial vegetated Concave vations: ter Present? Present?	ve Surface Yes	Salt Cru Aquatic Hydroge Oxidize Presence Recent Stunted 37) Other (E	st (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres along te of Reduced Iron (C Iron Reduction in Till or Stressed Plants (I Explain in Remarks)	g Living Roots C4) ed Soils (C6) D1) (LRR A)	☐ Drai ☐ Dry- ☐ Satu (C3) ☐ Geo ☐ Sha ☐ FAC ☐ Rais ☐ Fros	AA, and 4B) inage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (C9) imorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A)
Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca	arks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial vegetated Concav vations: ter Present? Present? Present? pillary fringe)	ve Surface Yes	Salt Cru Aquatic Hydroge Oxidized Presend Recent Stunted Other (B) Bo Depth (inc	st (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres along ee of Reduced Iron (C Iron Reduction in Till or Stressed Plants (I Explain in Remarks) nes):	g Living Roots C4) ed Soils (C6) D1) (LRR A) Wetlan	☐ Drai ☐ Dry- ☐ Satu (C3) ☐ Geo ☐ Sha ☐ FAC ☐ Rais ☐ Fros	AA, and 4B) Inage Patterns (B10) Inage Patterns (C2) Inage Pat
Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca	arks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial vegetated Concav vations: ter Present? Present? Present? pillary fringe)	ve Surface Yes	Salt Cru Aquatic Hydroge Oxidized Presend Recent Stunted Other (B) Bo Depth (inc	st (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres along ee of Reduced Iron (C Iron Reduction in Till or Stressed Plants (I explain in Remarks) enes):	g Living Roots C4) ed Soils (C6) D1) (LRR A) Wetlan	☐ Drai ☐ Dry- ☐ Satu (C3) ☐ Geo ☐ Sha ☐ FAC ☐ Rais ☐ Fros	AA, and 4B) Inage Patterns (B10) Inage Patterns (C2) Inage Pat
Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca Describe Re	arks (B1) Int Deposits (B2) Posits (B3) Int or Crust (B4) Posits (B5) Soil Cracks (B6) Pon Visible on Aerial Vegetated Concaverations: Iter Present? Present? Present? Present? Present? Present? Present (Stream (Strea	Yes	Salt Cru Aquatic Hydroge Oxidize Presence Recent Stunted Other (E) (B8) Depth (inc) Depth (inc) Depth (inc) Depth (inc) Depth (inc)	st (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres along ee of Reduced Iron (C Iron Reduction in Till or Stressed Plants (I explain in Remarks) nes):	g Living Roots (24) ed Soils (C6) D1) (LRR A) Wetlan	☐ Drai ☐ Dry- ☐ Satu (C3) ☐ Geo ☐ Sha ☐ FAC ☐ Rais ☐ Fros	AA, and 4B) Inage Patterns (B10) Inage Patterns (C2) Inage Pat
Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca Describe Re	arks (B1) Int Deposits (B2) Posits (B3) Int or Crust (B4) Posits (B5) Soil Cracks (B6) Pon Visible on Aerial Vegetated Concaverations: Iter Present? Present? Present? Present? Present? Present? Present (Stream (Strea	Yes	Salt Cru Aquatic Hydroge Oxidize Presence Recent Stunted Other (E) (B8) Depth (inc) Depth (inc) Depth (inc) Depth (inc) Depth (inc)	st (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres along ee of Reduced Iron (C Iron Reduction in Till or Stressed Plants (I Explain in Remarks) nes):	g Living Roots (24) ed Soils (C6) D1) (LRR A) Wetlan	☐ Drai ☐ Dry- ☐ Satu (C3) ☐ Geo ☐ Sha ☐ FAC ☐ Rais ☐ Fros	AA, and 4B) Inage Patterns (B10) Inage Patterns (C2) Inage Pat
Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca Describe Re	arks (B1) Int Deposits (B2) Posits (B3) Int or Crust (B4) Posits (B5) Soil Cracks (B6) Pon Visible on Aerial Vegetated Concaverations: Iter Present? Present? Present? Present? Present? Present? Present (Stream (Strea	Yes	Salt Cru Aquatic Hydroge Oxidize Presence Recent Stunted Other (E) (B8) Depth (inc) Depth (inc) Depth (inc) Depth (inc) Depth (inc)	st (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres along ee of Reduced Iron (C Iron Reduction in Till or Stressed Plants (I explain in Remarks) nes):	g Living Roots (24) ed Soils (C6) D1) (LRR A) Wetlan	☐ Drai ☐ Dry- ☐ Satu (C3) ☐ Geo ☐ Sha ☐ FAC ☐ Rais ☐ Fros	AA, and 4B) Inage Patterns (B10) Inage Patterns (C2) Inage Pat
Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca Describe Re	arks (B1) Int Deposits (B2) Posits (B3) Int or Crust (B4) Posits (B5) Soil Cracks (B6) Pon Visible on Aerial Vegetated Concaverations: Iter Present? Present? Present? Present? Present? Present? Present (Stream (Strea	Yes	Salt Cru Aquatic Hydroge Oxidize Presence Recent Stunted Other (E) (B8) Depth (inc) Depth (inc) Depth (inc) Depth (inc) Depth (inc)	st (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres along ee of Reduced Iron (C Iron Reduction in Till or Stressed Plants (I explain in Remarks) nes):	g Living Roots (24) ed Soils (C6) D1) (LRR A) Wetlan	☐ Drai ☐ Dry- ☐ Satu (C3) ☐ Geo ☐ Sha ☐ FAC ☐ Rais ☐ Fros	AA, and 4B) Inage Patterns (B10) Inage Patterns (C2) Inage Pat

Project/Site: Bond Road/SR 305		City/County	ty/County: Poulsbo, Kitsap Sampling Date: 11/20				
Applicant/Owner: Edward Rose and Sons				State: WA	Sampling Point: TH 12-A	4	
Investigator(s): <u>J. Bartlett</u>			Section, To	ownship, Range: <u>S 10 & 11</u>	, T 26 N, R 1E.		
Landform (hillslope, terrace, etc.): Terrace		Local relie	ef (concave,	, convex, none): sloping	Slope (%): <u>{</u>	5%	
Subregion (LRR): MLRA 2	_ Lat:			Long:	Datum:		
Soil Map Unit Name: 39 Poulsbo gravelly sandy loam, 0-6%							
Are climatic / hydrologic conditions on the site typical for this					-		
Are Vegetation, Soil, or Hydrology sign	-			ormal Circumstances" pres	ent? Ves⊠ No□		
				·			
Are Vegetation, Soil, or Hydrology natu				ed, explain any answers in		-4-	
SUMMARY OF FINDINGS – Attach site map	snowing	samplin	g point i	ocations, transects,	important features	, etc.	
Hydrophytic Vegetation Present? Yes ☐ No ☒		le th	e Sampled	ΙΔτρα			
Hydric Soil Present? Yes ☐ No ☒			in a Wetlar		o ⊠		
Wetland Hydrology Present? Yes ☐ No ☒				_	_		
Remarks: Upland area along east property line just upslop was reflagged as Test Hole 12-A (it was labeled 11-A during the state of the				e was located during the N	ovember 2010 field visit a	and it	
was remagged as reservoire 12 // (it was labeled 11 // daili	ig the 2000	demication	.,.				
VECETATION . Her rejentific nemes of plant							
VEGETATION – Use scientific names of plant							
Tree Stratum (Plot size: 30' diameter)	Absolute % Cover	Dominant Species?		Dominance Test works			
1. Thuja plicata		•	FAC	Number of Dominant Spe That Are OBL, FACW, or		(A)	
2. Alnus rubra			FAC			` '	
3. Frangula purshiana			FAC	Total Number of Domina Species Across All Strata		(B)	
4				Developed of Developed Con-		,	
Sapling/Shrub Stratum (Plot size: 30' diameter)		= Total C		Percent of Dominant Spe That Are OBL, FACW, or		A/B)	
Vaccinium parvifolium	10%	Yes	FACU	Prevalence Index work	sheet:	-	
Rhododendron macrophyllum	10%	Yes	UPL	Total % Cover of:	Multiply by:	_	
3. Mahonia nervosa	<u>5%</u>	No	FACU	OBL species			
4. <u>Sambucus racemosa</u>	5%	<u>No</u>	<u>FACU</u>	FACW species			
5				FAC species			
Herb Stratum (Plot size: 30 feet)	30%	= Total C	over	FACU species			
1. Polystichum munitum	30%	Yes	FACU	UPL species Column Totals:			
2				Column rotals.	(A)	_ (B)	
3				Prevalence Index :	= B/A =		
4				Hydrophytic Vegetation	n Indicators:		
5				☐ Dominance Test is >			
6				☐ Prevalence Index is			
7				☐ Morphological Adapt data in Remarks	ations' (Provide supportir or on a separate sheet)	ng	
8 9				☐ Wetland Non-Vascul	ar Plants ¹		
10				☐ Problematic Hydroph	ytic Vegetation ¹ (Explain))	
11				¹ Indicators of hydric soil abe present, unless distur	and wetland hydrology m	ust	
		= Total C		be present, unless distur	bed of problematic.		
Woody Vine Stratum (Plot size:)							
1				Hydrophytic Vegetation			
2					□ No ⊠		
% Bare Ground in Herb Stratum 70	= Total Cover						
Remarks: The hydrophytic vegetation criterion is not met b	ecause ther	e is less th	an 50% doi	minance by FAC.			
				•			

Depth	Matrix			Redox Features			
(inches)	Color (moist)	%	Colo	or (moist) % Type ¹	Loc ²	Texture	Remarks
0-6"	duff	100%				gr sa loa	
6-16"	7.5YR 4/4	100%				gr sa lo	
¹Type: C=C	Concentration D=D	enletion R	M-Red	luced Matrix, CS=Covered or Coate	d Sand Gr	ains	² Location: PL=Pore Lining, M=Matrix.
				s, unless otherwise noted.)	a cana ch		cators for Problematic Hydric Soils ³ :
☐ Histosol				Sandy Redox (S5)			2 cm Muck (A10)
	pipedon (A2)			Stripped Matrix (S6)			Red Parent Material (TF2)
☐ Black Hi	istic (A3)		□ I	Loamy Mucky Mineral (F1) (except	MLRA 1)		Other (Explain in Remarks)
	en Sulfide (A4)			Loamy Gleyed Matrix (F2)			
	d Below Dark Surfa	ce (A11)		Depleted Matrix (F3)		a	
	ark Surface (A12) Mucky Mineral (S1)			Redox Dark Surface (F6)			cators of hydrophytic vegetation and
	Bleyed Matrix (S4)			Depleted Dark Surface (F7) Redox Depressions (F8)			retland hydrology must be present, nless disturbed or problematic.
	Layer (if present):	•	<u>'</u>	redux Depressions (1 0)		u	mess disturbed of problematic.
	nches):					Hydric	Soil Present? Yes ☐ No ⊠
	, -		not hoo	ause of the high chroma of the soil	orofilo	,	
rtemants. 11	ne nyane son enten	1011 13 1101 11	iict beet	ause of the riight emorna of the son	oronic.		
Wetland Hy	drology Indicator		iro de obe	coly all that apply)			oppodery Indicators (2 or more required)
Wetland Hy Primary Indi	rdrology Indicator		ired; che				econdary Indicators (2 or more required)
Wetland Hy Primary Indi ☐ Surface	rdrology Indicator icators (minimum o Water (A1)		ired; che	☐ Water-Stained Leaves (B9) (ex	ccept MLR		Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hy Primary Indi ☐ Surface ☐ High Wa	rdrology Indicator icators (minimum o Water (A1) ater Table (A2)		ired; che	☐ Water-Stained Leaves (B9) (ex 1, 2, 4A, and 4B)	cept MLR	RA [Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hy Primary Indi ☐ Surface ☐ High Wa ☐ Saturation	rdrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3)		ired; che	☐ Water-Stained Leaves (B9) (ex 1, 2, 4A, and 4B) ☐ Salt Crust (B11)	cept MLR	RA -	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M	rdrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) farks (B1)		ired; che	☐ Water-Stained Leaves (B9) (ex 1, 2, 4A, and 4B) ☐ Salt Crust (B11) ☐ Aquatic Invertebrates (B13)	ccept MLR	A C	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer	rdrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) darks (B1) nt Deposits (B2)		ired; che	☐ Water-Stained Leaves (B9) (example 1, 2, 4A, and 4B) ☐ Salt Crust (B11) ☐ Aquatic Invertebrates (B13) ☐ Hydrogen Sulfide Odor (C1)		A C	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep	rdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) flarks (B1) nt Deposits (B2) posits (B3)		ired; che	□ Water-Stained Leaves (B9) (extended to the leaves (B1)) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Invertebrates (B13)	Living Root	A C	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma	rdrology Indicator icators (minimum or Water (A1) ater Table (A2) on (A3) farks (B1) int Deposits (B2) posits (B3) at or Crust (B4)		ired; che	Water-Stained Leaves (B9) (ex 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along I Presence of Reduced Iron (C4	Living Root	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3)
Wetland Hy Primary Indi Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma	rdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) flarks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5)		ired; che	Water-Stained Leaves (B9) (ex 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along II Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled	Living Root) I Soils (C6)	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	rdrology Indicator icators (minimum or Water (A1) ater Table (A2) on (A3) darks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6)	f one requi		Water-Stained Leaves (B9) (ex 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along I Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Stunted or Stressed Plants (D2)	Living Root) I Soils (C6)	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	rdrology Indicator icators (minimum or Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria	f one requi	(B7)	Water-Stained Leaves (B9) (ex 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along II Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled	Living Root) I Soils (C6)	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	rdrology Indicator icators (minimum or Water (A1) ater Table (A2) on (A3) darks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Conca	f one requi	(B7)	Water-Stained Leaves (B9) (ex 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along I Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Stunted or Stressed Plants (D2)	Living Root) I Soils (C6)	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely	rdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) flarks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Concarvations:	f one requi	(B7) e (B8)	Water-Stained Leaves (B9) (ex 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along I Presence of Reduced Iron (C4 Recent Iron Reduction in Tilled Stunted or Stressed Plants (D7) Other (Explain in Remarks)	Living Root) I Soils (C6)	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser	rdrology Indicator ricators (minimum or Water (A1) ater Table (A2) on (A3) farks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Concarvations:	f one requi	(B7) e (B8) No ⊠	Water-Stained Leaves (B9) (ex 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along I Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Stunted or Stressed Plants (D' Other (Explain in Remarks)	Living Root) I Soils (C6)	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Water Water Table	rdrology Indicator icators (minimum or Water (A1) ater Table (A2) on (A3) farks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria by Vegetated Conca rvations: ter Present?	I Imagery (ve Surface Yes Yes Yes	(B7) e (B8) No ⊠ No ⊠	Water-Stained Leaves (B9) (ex. 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along I Presence of Reduced Iron (C4 Recent Iron Reduction in Tilled Stunted or Stressed Plants (D⁻ Other (Explain in Remarks) Depth (inches): Depth (inches):	Living Root) I Soils (C6) (LRR A)	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Water Table Saturation P (includes ca	rdrology Indicator ricators (minimum or Water (A1) ater Table (A2) on (A3) farks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Concarvations: ter Present? Present? Present? pillary fringe)	I Imagery (ve Surface Yes Yes Yes Yes Yes Yes	(B7) e (B8) No ⊠ No ⊠ No ⊠	Water-Stained Leaves (B9) (ex. 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along I Presence of Reduced Iron (C4 Recent Iron Reduction in Tilled Stunted or Stressed Plants (D⁻ Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches):	Living Root) I Soils (C6) (LRR A) Wetla	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Water Table Saturation P (includes ca	rdrology Indicator ricators (minimum or Water (A1) ater Table (A2) on (A3) farks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Concarvations: ter Present? Present? Present? pillary fringe)	I Imagery (ve Surface Yes Yes Yes Yes Yes Yes	(B7) e (B8) No ⊠ No ⊠ No ⊠	Water-Stained Leaves (B9) (ex. 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along I Presence of Reduced Iron (C4 Recent Iron Reduction in Tilled Stunted or Stressed Plants (D⁻ Other (Explain in Remarks) Depth (inches): Depth (inches):	Living Root) I Soils (C6) (LRR A) Wetla	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Water Table Saturation P (includes ca	rdrology Indicator ricators (minimum or Water (A1) ater Table (A2) on (A3) farks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Concarvations: ter Present? Present? Present? pillary fringe)	I Imagery (ve Surface Yes Yes Yes Yes Yes Yes	(B7) e (B8) No ⊠ No ⊠ No ⊠	Water-Stained Leaves (B9) (ex. 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along I Presence of Reduced Iron (C4 Recent Iron Reduction in Tilled Stunted or Stressed Plants (D⁻ Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches):	Living Root) I Soils (C6) (LRR A) Wetla	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Wetland Hy Primary Indi Surface High Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Water Table Saturation P (includes ca	rdrology Indicator ricators (minimum or Water (A1) ater Table (A2) on (A3) flarks (B1) at or Crust (B4) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Concarvations: ter Present? Present? Present? Present? pillary fringe) ecorded Data (streams)	I Imagery (ve Surface Yes Yes Yes Yes Am gauge,	(B7) e (B8) No ⊠ No ⊠ No ⊠ monitor	Water-Stained Leaves (B9) (ex. 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along I Presence of Reduced Iron (C4 Recent Iron Reduction in Tilled Stunted or Stressed Plants (D⁻ Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches):	Living Root) I Soils (C6)) (LRR A) Wetla	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Wetland Hy Primary Indi Surface High Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Water Table Saturation P (includes ca	rdrology Indicator ricators (minimum or Water (A1) ater Table (A2) on (A3) flarks (B1) at or Crust (B4) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Concarvations: ter Present? Present? Present? Present? pillary fringe) ecorded Data (streams)	I Imagery (ve Surface Yes Yes Yes Yes Am gauge,	(B7) e (B8) No ⊠ No ⊠ No ⊠ monitor	Water-Stained Leaves (B9) (ex. 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along I Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Stunted or Stressed Plants (Dr. Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): Depth (inches):	Living Root) I Soils (C6)) (LRR A) Wetla	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Wetland Hy Primary Indi Surface High Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Water Table Saturation P (includes ca	rdrology Indicator ricators (minimum or Water (A1) ater Table (A2) on (A3) flarks (B1) at or Crust (B4) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Concarvations: ter Present? Present? Present? Present? pillary fringe) ecorded Data (streams)	I Imagery (ve Surface Yes Yes Yes Yes Am gauge,	(B7) e (B8) No ⊠ No ⊠ No ⊠ monitor	Water-Stained Leaves (B9) (ex. 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along I Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Stunted or Stressed Plants (Dr. Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): Depth (inches):	Living Root) I Soils (C6)) (LRR A) Wetla	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

Applicant/Owner_Edward Rose and Sons State WA Sampling Print: TH 13-A Investigator(s): J. Bartlett Section, Township, Range. Still & \$1.1, T.2.6 N. R.16.	Project/Site: Bond Road/SR 305		City/County	y: <u>Poulsbo,</u>	Kitsap	Sampling Date: 11/2010 6-2016
Local relief (concave, convex, none): sloping	Applicant/Owner: Edward Rose and Sons				State: WA	Sampling Point: TH 13-A
Lat	Investigator(s): <u>J. Bartlett</u>			Section, To	ownship, Range: <u>S 10 & 11</u>	, T 26 N, R 1E.
Soil Map Unit Name: 39 Poulsbo gravelly sandy loam, 0-6% slopes	Landform (hillslope, terrace, etc.): hillslope		Local relie	ef (concave	, convex, none): sloping	Slope (%): <u>5%</u>
Are dimatic / hydrologic conditions on the site typical for this time of year? Yes \Boxelon \	Subregion (LRR): MLRA 2	Lat:			_ Long:	Datum:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes \Boxelon	Soil Map Unit Name: 39 Poulsbo gravelly sandy loam, 0-6%	slopes			NWI classificat	tion: <u>UPL</u>
Are Vegetation						
Summary OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.		-				ent? Yes ⊠ No □
SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc Hydrophytic Vegetation Present?					•	
Hydric Soil Present?						·
Hydroc Soil Present?	Hydrophytic Vegetation Present? Yes ☐ No ☒					
Welland Hydrology Present?				•		
where trail curves to the south. This test hole was located during the November 2010 field visit and it was reflagged as Test Hole 13-A (it was labeled 12-A during the previous delineation). VEGETATION - Use scientific names of plants.	Wetland Hydrology Present? Yes ☐ No ☒		with	ın a wetiai	na? Yes ∐ No) <u>N</u>
Absolute	where trail curves to the south. This test hole was located					
Tree Stratum (Plot size: 30' diameter)	VEGETATION – Use scientific names of plan	ts.				
1. Alnus rubra		Absolute	Dominant	Indicator	Dominance Test works	sheet:
2.						
3.					That Are OBL, FACW, o	r FAC: <u>1</u> (A)
4						
20%					Species Across All Strata	a: <u>6</u> (B)
1. Oemleria cerasiformis						
2. Holodiscus discolor 2. Holodiscus discolor 3. Rubus parviflorus 5% No FACU 6.		.=0.	.,	=		
3. Rubus parviflorus 4						
4						
FAC species x 3 =						
Herb Stratum (Plot size: 30 feet) 1. Rubus ursinus 50% Yes FACU 2. Polystichum munitum 20% Yes FACU 2. Polystichum munitum 20% Yes FACU 2. Polystichum munitum 20% Yes FACU 2. Prevalence Index = B/A =				-		
Herb Stratum (Plot size: 30 feet) 1. Rubus ursinus 50% Yes FACU 2. Polystichum munitum 20% Yes FACU 3. Carex deweyana 10% No FACW FACW Prevalence Index = B/A =	<u> </u>		= Total C	over		
1. Rubus ursinus	Herb Stratum (Plot size: 30 feet)	3070			· ·	
3. Carex deweyana 10% No FACW Prevalence Index = B/A =			Yes	FACU		
4. Juncus effusus 5. No FACW Hydrophytic Vegetation Indicators: Dominance Test is >50% Prevalence Index is 3.0¹ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Woody Vine Stratum (Plot size:) 1. Rubus armeniacus		20%	Yes			
5	i i					
6						
7					_	
data in Remarks or on a separate sheet) Wetland Non-Vascular Plants						
9						
10					☐ Wetland Non-Vascul	ar Plants ¹
11					☐ Problematic Hydroph	nytic Vegetation ¹ (Explain)
Woody Vine Stratum (Plot size:) 1. Rubus armeniacus 10% Yes FAC Vegetation Present? Hydrophytic Vegetation Present? 2 10% = Total Cover						
1. Rubus armeniacus 2					be present, unless distu	bed of problematic.
2	,	10%	Yes	FAC	Hydrophytic	
% Bare Ground in Herb Stratum 5%					Vegetation	. □ No ⊠
	% Bare Ground in Herb Stratum 5%	10%	= Total C	over		
	<u> </u>	pecause the	re is less th	an 50% do	minance by FAC.	

Profile Description: (D	escribe to the d	epth needed to doc	ument the indicate	or or confirm	n the absence of indicators.)
	Matrix		dox Features		
(inches) Color (mois		Color (moist)	<u>%</u> Type		Texture Remarks
<u>0-3"</u> <u>10YR 4/3</u>	100%				gr sa loa
3-16" <u>10YR 4/4</u>	100%			_	gr sa lo
		<u> </u>			
		· -		-	
<u> </u>					
¹ Type: C=Concentration Hydric Soil Indicators:				ated Sand Gr	rains. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :
	(Applicable to a				-
☐ Histosol (A1) ☐ Histic Epipedon (A2)		☐ Sandy Redox☐ Stripped Matri			☐ 2 cm Muck (A10) ☐ Red Parent Material (TF2)
☐ Black Histic (A3)		• • • • • • • • • • • • • • • • • • • •	Mineral (F1) (exce	ept MLRA 1)	Other (Explain in Remarks)
☐ Hydrogen Sulfide (A	1)	☐ Loamy Gleyed	, , ,	,	
☐ Depleted Below Dark	Surface (A11)	☐ Depleted Matr			
☐ Thick Dark Surface (•	☐ Redox Dark S	` '		³ Indicators of hydrophytic vegetation and
Sandy Mucky Minera		☐ Depleted Dark	, ,		wetland hydrology must be present,
Sandy Gleyed Matrix		☐ Redox Depres	ssions (F8)		unless disturbed or problematic.
Restrictive Layer (if pre	-				
Type:		_			Hudria Cail Brasanta - Vas 🗔 - Na 🕅
Depth (inches):				" "	Hydric Soil Present? Yes ☐ No ☒
Remarks: The hydric soi	criterion is not m	net because of the hi	gn chroma of the so	oli profile.	
HYDROLOGY					
Wetland Hydrology Ind	icators:				
Primary Indicators (minir	<u>num of one requi</u>	red; check all that ap	ply)		Secondary Indicators (2 or more required)
☐ Surface Water (A1)		☐ Water-St	ained Leaves (B9)	(except MLR	RA Water-Stained Leaves (B9) (MLRA 1, 2,
☐ High Water Table (A	2)	1, 2,	4A, and 4B)		4A, and 4B)
☐ Saturation (A3)		☐ Salt Crus	` '		☐ Drainage Patterns (B10)
☐ Water Marks (B1)			nvertebrates (B13)		☐ Dry-Season Water Table (C2)
Sediment Deposits (32)		Sulfide Odor (C1)		Saturation Visible on Aerial Imagery (C9)
☐ Drift Deposits (B3)			Rhizospheres alor		
Algal Mat or Crust (B	4)		e of Reduced Iron (☐ Shallow Aquitard (D3)
☐ Iron Deposits (B5)	(D.O.)		on Reduction in Til	, ,	, , ,
☐ Surface Soil Cracks			or Stressed Plants	(D1) (LRR A)	
☐ Inundation Visible or		,	kplain in Remarks)		☐ Frost-Heave Hummocks (D7)
☐ Sparsely Vegetated Field Observations:	Concave Sunace	(DO)			
Surface Water Present?	V00 🗖	No ⊠ Depth (inch	00).		
			es):		
Water Table Present?			es):		and Hydrology Procent? Vec 🗆 No 🖂
Saturation Present? (includes capillary fringe		No 🛛 Depth (inch	es):	_ wette	and Hydrology Present? Yes ☐ No ⊠
Describe Recorded Data		monitoring well, aeria	Il photos, previous	inspections),	if available:
Remarks: No hydrology	present and no w	etland hydrology indi	cators were observ	/ed.	

Project/Site: Bond Road/SR 305		City/Cou	nty: Poulsbo,	Kitsap	_ Sampling Date: 11/	2010 6-2016
Applicant/Owner: Edward Rose and Sons				State: WA	Sampling Point: TH 14-A	
Investigator(s): <u>J. Bartlett</u>			_ Section, To	ownship, Range: <u>S 10 & 1</u>	1, T 26 N, R 1E.	
Landform (hillslope, terrace, etc.): Terrace		Local re	elief (concave,	, convex, none): sloping	Slope	(%): <u>5%</u>
Subregion (LRR): MLRA 2	Lat:			Long:	Datum:	
Soil Map Unit Name: 39 Poulsbo gravelly sandy loam, 0-6%						
Are climatic / hydrologic conditions on the site typical for this						
Are Vegetation, Soil, or Hydrology sign	-			ormal Circumstances" pre		П
Are Vegetation, Soil, or Hydrology natu				ed, explain any answers i	_	_
SUMMARY OF FINDINGS – Attach site map						ures, etc.
Liberten Branch (1) Von Station Branch (2) Von D. No. 7						
Hydrophytic Vegetation Present? Yes ☐ No ☒ Hydric Soil Present? Yes ☐ No ☒			the Sampled		_	
Wetland Hydrology Present? Yes ☐ No ⊠		wi	ithin a Wetlar	nd? Yes □ N	10 ⊠	
Remarks: Upland area in northeast corner of project site.				e November 2010 field de	lineation and data pro	esented
here was collected during the 2006 delineation. It is flagg	ed as Test F	Hole A-13	3 in the field.			
VEGETATION – Use scientific names of plan	ts.					
	Absolute		int Indicator	Dominance Test work	sheet:	
Tree Stratum (Plot size: 30 feet)		•	s? Status	Number of Dominant Sp		
1. Tsuga heterophylla	<u>25%</u>		_	That Are OBL, FACW, o	or FAC: 0	(A)
2. Frangula purshiana				Total Number of Domin		(D)
3				Species Across All Stra	ata: <u>3</u>	(D)
	30%			Percent of Dominant Sp That Are OBL, FACW, of		(Δ/R)
Sapling/Shrub Stratum (Plot size: 30' diameter)				That Are OBL, FACW, t	51 FAC. <u>0</u>	(A/D)
1. Gaultheria shallon	50%	Yes	FACU	Prevalence Index wor		
2. Vaccinium ovatum			<u>FACU</u>		Multiply b	-
3. Vaccinium parvifolium			<u>UPL</u>	OBL species		
4				FACW species FAC species		
5	80%			FACU species		
Herb Stratum (Plot size: 30 feet)	0070	_ 10101	00101	-	x 5 =	
Polystichum munitum	5%	Yes	FACU	Column Totals:		(B)
2					B./A	
3					= B/A =	_
4				Hydrophytic Vegetation ☐ Dominance Test is:		
5				☐ Prevalence Index is		
6 7				_	otations¹ (Provide sup	oporting
8				data in Remarks	s or on a separate sh	
9.				Wetland Non-Vascu		
10				☐ Problematic Hydrop	• • •	
11				¹ Indicators of hydric soi be present, unless distu		
	<u>5%</u>			process, amose distr		
Woody Vine Stratum (Plot size:)						
1				Hydrophytic Vegetation		
2				_	s □ No ⊠	
% Bare Ground in Herb Stratum 95%		_ 10tai	Cover			
Remarks: The hydrophytic vegetation criterion is not met be	oecause the	re is less	than 50% dor	minance by FAC.		

Type: C		Remarks	c ² Texture	<u>itures</u> <u>Type¹ Lo</u>	or (moist)	(;Olr	%	Color (moist)	Depth (inches)
"Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. "Location: PL=Pore Lining, M=Mydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histoscol (A1) Histoscol (A2) Stripped Matrix (R3) Depleted Matrix (R3) Depleted Matrix (R3) Depleted Matrix (R3) Depleted Below Dark Surface (A11) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Mucky Matrix (R3) Depleted Matrix (R3) Redox Dark Surface (F8) Sandy Gleyed Matrix (R3) Pepth (inches): Type: Pepth (inches): Remarks: The hydric soil criterion is not met because of the high chroma of the soil profile. YPROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Saturation (A3) Saturation (A3) Saturation (A3) Saturation (A3) Saturation (A3) Aquatic Invertebrates (B13) Drift Deposits (B3) Aquatic Invertebrates (B13) Drift Deposits (B3) Aquatic Invertebrates (B13) Drift Deposits (B3) Reservation (B4) Reservation				<u> </u>	or (moiot)			, ,	, , ,
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosce (A1)		<u> </u>	yı sa ıva			<u> </u>	100 /6	1011/4/3	-10
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosce (A1)									
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosce (A1)									
Histosol (A1)									
Histosol (A1)									
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosce (A1)									
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1)								_	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)								-	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1)		<u> </u>							
Histosol (A1)									
Histic Epipedon (A2)	c Soils":	•		noted.)			pplicable to		-
Black Histic (A3)		` '			,			· ,	
Hydrogen Sulfide (A4)		, ,		I (E1) (except MI E					
Depleted Below Dark Surface (A11) □ Depleted Matrix (F3) □ Thick Dark Surface (A12) □ Redox Dark Surface (F6) □ Sandy Mucky Mineral (S1) □ Depleted Dark Surface (F7) □ Sandy Mucky Mineral (S1) □ Depleted Dark Surface (F7) □ Sandy Gleyed Matrix (S4) □ Redox Depressions (F8) unless disturbed or problematic. Restrictive Layer (if present):		Other (Explain in Remarks)	(A I)						
Thick Dark Surface (A12)				(12)			ırface (A11)	` '	_ , ,
Sandy Mucky Mineral (S1)	on and	dicators of hydrophytic vegetation	3Inc	(F6)			` ,		
Sandy Gleyed Matrix (S4)				• •			•	, ,	
Pyper Depth (inches): De				. ,	•				
Depth (inches): Hydric Soil Present? Yes No Remarks: The hydric soil criterion is not met because of the high chroma of the soil profile. Primary Indicators (minimum of one required; check all that apply)							nt):	Layer (if present)	Restrictive I
Commarks: The hydric soil criterion is not met because of the high chroma of the soil profile.									Type:
Vertland Hydrology Indicators: Vertland Hydrology Present? Vestination Vestinati	\boxtimes	Soil Present? Yes ☐ No ⊠	Hydric					nches):	Depth (in
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more regiment place) Surface Water (A1) Water-Stained Leaves (B9) (except MLRA Water-Stained Leaves (B9) (M 4A, and 4B) 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 Importion (D2) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) In 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 Prost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) Depth (inches): Water Table Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): <td< td=""><td></td><td></td><td>Α</td><td>ma of the soil profil</td><td>ause of the hig</td><td>met hec</td><td>terion is not</td><td>he hydric soil criter</td><td>Remarks: Th</td></td<>			Α	ma of the soil profil	ause of the hig	met hec	terion is not	he hydric soil criter	Remarks: Th
Vetland Hydrology Indicators: Irrimary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more regiment) Surface Water (A1) Water-Stained Leaves (B9) (except MLRA Water-Stained Leaves (B9) (Mater-Stained Leaves (B9) (OGY	/DROLO
Surface Water (A1)							tors:		
High Water Table (A2) Saturation (A3)		Sacandam Indicatora (2 ar mara r							retialia ily
High Water Table (A2) Saturation (A3)	required)	secondary indicators (2 or more re	9		eck all that app	<u>uired; ch</u>	n of one req	icators (minimum c	-
Saturation (A3)		•		eaves (B9) (excep		<u>uired; ch</u>	n of one requ	•	Primary Indic
□ Sediment Deposits (B2) □ Hydrogen Sulfide Odor (C1) □ Saturation Visible on Aerial Im. □ Drift Deposits (B3) □ Oxidized Rhizospheres along 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 □ Inundation Visible on Aerial Imagery (B7) □ Other (Explain in Remarks) □ Frost-Heave Hummocks (D7) □ Sparsely Vegetated Concave Surface (B8) Field Observations: □ Outer (Explain in Remarks) □ Frost-Heave Hummocks (D7) □ Surface Water Present? Yes □ No □ Depth (inches): □ □ Other (Explain in Remarks) □ Other		☐ Water-Stained Leaves (B9) (M			☐ Water-Sta	uired; ch	n of one req	Water (A1)	Primary Indic
Sediment Deposits (B2)		☐ Water-Stained Leaves (B9) (M 4A, and 4B)		I 4B)	☐ Water-Sta	<u>uired; ch</u>	n or one req	Water (A1) ater Table (A2)	Primary India Surface \ High Wa
Algal Mat or Crust (B4)	(MLRA 1, 2	☐ Water-Stained Leaves (B9) (M 4A, and 4B) ☐ Drainage Patterns (B10)	t MLRA [I 4B)	☐ Water-Sta 1, 2, 4 ☐ Salt Crust	uired; ch	n or one req	Water (A1) ater Table (A2) on (A3)	Primary Indic Surface \ High Wa Saturation
□ 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 □ Inundation Visible on Aerial Imagery (B7) □ Other (Explain in Remarks) □ Frost-Heave Hummocks (D7) □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No ☑ Depth (inches): □ Vater Table Present? Yes □ No ☑ Depth ((MLRA 1, 2	Water-Stained Leaves (B9) (M 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)	t MLRA [1 4B) rates (B13)	☐ Water-Sta 1, 2, 4 ☐ Salt Crust ☐ Aquatic In	<u>uired; ch</u>	n or one req	Water (A1) ater Table (A2) on (A3) farks (B1)	Primary Indice Surface High Wa Saturatio Water Ma
Surface Soil Cracks (B6)	(MLRA 1, 2	Water-Stained Leaves (B9) (M 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Im-	t MLRA [rates (B13) e Odor (C1)	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen	<u>uired; ch</u>	n or one req	Water (A1) ater Table (A2) on (A3) flarks (B1) nt Deposits (B2)	Primary Indic Surface High Wa Saturatio Water Ma Sedimen
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in Remarks) ☐ Frost-Heave Hummocks (D7) ☐ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): Water Table Present? Yes ☐ No ☒ Depth (inches): Saturation Present? Yes ☐ No ☒ Depth (inches): Seturation Present? Yes ☐ No ☒ Depth (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	(MLRA 1, 2	Water-Stained Leaves (B9) (M 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Image	t MLRA [[[[g Roots (C3) [rates (B13) e Odor (C1) pheres along Living	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized	<u>uired; ch</u>	n or one req	Water (A1) ater Table (A2) on (A3) flarks (B1) nt Deposits (B2) posits (B3)	Primary Indic Surface High Wa Saturatic Water Mater Mater Mater Sediment
Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No ☒ Depth (inches): Vater Table Present? Yes □ No ☒ Depth (inches): Saturation Present? Yes □ No ☒ Depth (inches): Seturation Present? Yes □ No ☒ Depth (inches): Seturation Present? Yes □ No ☒ Depth (inches): Seturation Present? Yes □ No ☒ Depth (inches):	(MLRA 1, 2	Water-Stained Leaves (B9) (M 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imperior (D2) Geomorphic Position (D2) Shallow Aquitard (D3)	t MLRA [rates (B13) e Odor (C1) pheres along Living	Water-State 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized Presence	<u>uired; ch</u>	n or one req	Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	Primary India Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma
Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Seturation Present? Yes No Depth (inches):	(MLRA 1, 2 2) Imagery (CS	Water-Stained Leaves (B9) (M 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Im Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)	t MLRA [[[[[[g Roots (C3) [[[[[] []]]]]]]]]]]]]	rates (B13) e Odor (C1) pheres along Living duced Iron (C4) luction in Tilled Soil	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized Presence Recent In	<u>uired; ch</u>		Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	Primary India Surface V High Wa Saturation Water M Sedimen Drift Dep Algal Ma Iron Dep
Surface Water Present? Yes \ No \ Depth (inches): Water Table Present? Yes \ No \ Depth (inches): Saturation Present? Yes \ No \ Depth (inches): Security Sec	(MLRA 1, 2 2) Imagery (CS	Water-Stained Leaves (B9) (M 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Im Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR	t MLRA [[[[[[g Roots (C3) [[[[[] []]]]]]]]]]]]]	rates (B13) e Odor (C1) pheres along Living duced Iron (C4) luction in Tilled Soil sed Plants (D1) (LI	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized Presence Recent Irc)	Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6)	Primary Indice Surface V High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep
Water Table Present? Yes ☐ No ☒ Depth (inches): Saturation Present? Yes ☐ No ☒ Depth (inches): Wetland Hydrology Present? Yes ☐ No ☒ Depth (inches): includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	(MLRA 1, 2 2) Imagery (CS	Water-Stained Leaves (B9) (M 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Im Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR	t MLRA [[[[[[g Roots (C3) [[[[[] []]]]]]]]]]]]]	rates (B13) e Odor (C1) pheres along Living duced Iron (C4) luction in Tilled Soil sed Plants (D1) (LI	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized Presence Recent Irc	v (B7)) rial Imagery	Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria	Primary Indic Surface Note that the second
Water Table Present? Yes ☐ No ☒ Depth (inches): Saturation Present? Yes ☐ No ☒ Depth (inches): Wetland Hydrology Present? Yes ☐ No ☒ Depth (inches): includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	(MLRA 1, 2 2) Imagery (CS	Water-Stained Leaves (B9) (M 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Im Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR	t MLRA [[[[[[g Roots (C3) [[[[[] []]]]]]]]]]]]]	rates (B13) e Odor (C1) pheres along Living duced Iron (C4) luction in Tilled Soil sed Plants (D1) (LI	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized Presence Recent Irc	v (B7)) rial Imagery	Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Conca	Primary Indice Surface Note that the second
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	(MLRA 1, 2 2) Imagery (CS	Water-Stained Leaves (B9) (M 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Im Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR	t MLRA [[[[[[g Roots (C3) [[[[[] []]]]]]]]]]]]]	rates (B13) e Odor (C1) pheres along Living duced Iron (C4) luction in Tilled Soil sed Plants (D1) (Li n Remarks)	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized Presence Recent Irc Stunted o Other (Ex	/ (B7) Ce (B8)) rial Imagery ncave Surfac	Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Concar rvations:	Primary India Surface High Wa Saturatic Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundatic Sparsely Field Obser
includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	(MLRA 1, 2 2) Imagery (CS	Water-Stained Leaves (B9) (M 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Im Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR	t MLRA [[[[[[g Roots (C3) [[[[[] []]]]]]]]]]]]]	rates (B13) e Odor (C1) pheres along Living duced Iron (C4) luction in Tilled Soil sed Plants (D1) (Li	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized Presence Recent Irc Stunted o Other (Ex	r (B7) ce (B8) No ⊠) rial Imagery ncave Surfac Yes □	Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Concarvations: ter Present?	Primary India Surface Note that the second in the second
	(MLRA 1, 2 2) Imagery (CS RR A)	Water-Stained Leaves (B9) (M 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Image Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR Frost-Heave Hummocks (D7)	t MLRA [[[[[] [] [] [] [] [] [] []	rates (B13) e Odor (C1) pheres along Living duced Iron (C4) luction in Tilled Soil sed Plants (D1) (Li	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized Presence Recent Irc Stunted o Other (Ex	/ (B7) ce (B8) No ⊠ No ⊠) erial Imagery ncave Surfac Yes □ Yes □	Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca rvations: ter Present?	Primary Indice Primary Indice Surface High Wa Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Water Table
Remarks: No hydrology present and no wetland hydrology indicators observed during the field visits.	(MLRA 1, 2 2) Imagery (CS RR A)	Water-Stained Leaves (B9) (M 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Im □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR □ Frost-Heave Hummocks (D7)	t MLRA [[[[[g Roots (C3) [[]]]]] [] [] [] [] [] [] [rates (B13) e Odor (C1) pheres along Living duced Iron (C4) luction in Tilled Soil sed Plants (D1) (Li n Remarks)	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized Presence Recent Ir Stunted o Other (Ex Depth (inche	v (B7) ce (B8) No ⊠ No ⊠ No ⊠) erial Imagery ncave Surfac Yes ☐ Yes ☐ Yes ☐	Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Conca rvations: ter Present? e Present? pipillary fringe)	Primary Indice Primary Indice Surface High Wa Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes cap
Remarks: No hydrology present and no wetland hydrology indicators observed during the field visits.	(MLRA 1, 2 2) Imagery (Cs	Water-Stained Leaves (B9) (M 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Im □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR □ Frost-Heave Hummocks (D7)	t MLRA [[[[[g Roots (C3) [[]]]]] [] [] [] [] [] [] [rates (B13) e Odor (C1) pheres along Living duced Iron (C4) luction in Tilled Soil sed Plants (D1) (Li n Remarks)	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized Presence Recent Ir Stunted o Other (Ex Depth (inche	v (B7) ce (B8) No ⊠ No ⊠ No ⊠) erial Imagery ncave Surfac Yes ☐ Yes ☐ Yes ☐	Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Conca rvations: ter Present? e Present? pipillary fringe)	Primary Indice Primary Indice Surface High Wa Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P Gincludes cap
	(MLRA 1, 2 2) Imagery (Cs	Water-Stained Leaves (B9) (M 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Im □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR □ Frost-Heave Hummocks (D7)	t MLRA [[[[[g Roots (C3) [[]]]]] [] [] [] [] [] [] [rates (B13) e Odor (C1) pheres along Living duced Iron (C4) luction in Tilled Soil sed Plants (D1) (Li n Remarks)	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized Presence Recent Ir Stunted o Other (Ex Depth (inche	v (B7) ce (B8) No ⊠ No ⊠ No ⊠) erial Imagery ncave Surfac Yes ☐ Yes ☐ Yes ☐	Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Conca rvations: ter Present? e Present? pipillary fringe)	Primary Indice Primary Indice Surface High Wa Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes cap
	(MLRA 1, 2 2) Imagery (Cs	Water-Stained Leaves (B9) (M 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Im □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR □ Frost-Heave Hummocks (D7)	t MLRA [[[[g Roots (C3) [[] [] [] [] [] Wetland Hydr [] [] []	rates (B13) e Odor (C1) pheres along Living duced Iron (C4) luction in Tilled Soil sed Plants (D1) (Li n Remarks)	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized Presence Recent Irc Stunted o Other (Ex Depth (inche Depth (inche	v (B7) ce (B8) No ⊠ No ⊠ No ⊠) rial Imagery ncave Surfac Yes □ Yes □ Yes □ ream gauge	Water (A1) ater Table (A2) on (A3) Marks (B1) Int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) Ion Visible on Aeria y Vegetated Conca rvations: ter Present? Present? Present? pillary fringe) ecorded Data (streat	Primary Indice Primary Indice Surface of High Wa Saturation Water Management Drift Dep Algal Management Iron Dep Surface of Surface of Surface Water Table Saturation Princludes cap Describe Reservance of Surface Surface Saturation Princludes cap
	(MLRA 1, 2 2) Imagery (Cs	Water-Stained Leaves (B9) (M 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Im □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR □ Frost-Heave Hummocks (D7)	t MLRA [[[[g Roots (C3) [[] [] [] [] [] Wetland Hydr [] [] []	rates (B13) e Odor (C1) pheres along Living duced Iron (C4) luction in Tilled Soil sed Plants (D1) (Li n Remarks)	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized Presence Recent Irc Stunted o Other (Ex Depth (inche Depth (inche	v (B7) ce (B8) No ⊠ No ⊠ No ⊠) rial Imagery ncave Surfac Yes □ Yes □ Yes □ ream gauge	Water (A1) ater Table (A2) on (A3) Marks (B1) Int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) Ion Visible on Aeria y Vegetated Conca rvations: ter Present? Present? Present? pillary fringe) ecorded Data (streat	Primary Indice Primary Indice Surface In High Wa Saturation Water Management Sediment Drift Dep Algal Management Iron Dep Surface Inundation Sparsely Field Obser Surface Water Table Saturation Princludes cap Describe Re

Project/Site: Bond Road/SR 305	(City/Count	Sampling Date: 11/2010 6-2016				
Applicant/Owner: Edward Rose and Sons				State: WA	Sampling Point: TH 15-A		
Investigator(s): J. Bartlett			Section, To	ownship, Range: <u>S 10 & 11</u>	, T 26 N, R 1	<u>E.</u>	
Landform (hillslope, terrace, etc.): terrace		Local reli	ef (concave,	convex, none): undulating		Slope (%): <u>5%</u>	
Subregion (LRR): MLRA 2	_ Lat:			Long:	D	atum:	
Soil Map Unit Name: 39 Poulsbo gravelly sandy loam, 0-6%							
Are climatic / hydrologic conditions on the site typical for this							
Are Vegetation, Soil, or Hydrology sign	-			ormal Circumstances" prese	ent? Yes⊠	No □	
Are Vegetation, Soil, or Hydrology natu	-			ed, explain any answers in		140 🗖	
SUMMARY OF FINDINGS – Attach site map						features, etc.	
/ / / / / / / / / / / / / / / / / / /	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		ig point it		portant	10010100, 0101	
Hydrophytic Vegetation Present? Yes ☐ No ☒		Is th	he Sampled	Area			
Hydric Soil Present? Yes ☐ No ☒		with	nin a Wetlar	nd? Yes ☐ No) 🖂		
Wetland Hydrology Present? Yes ☐ No ☒ Remarks: Upland area in northwest corner of project site.	This halo w	oo not four	nd during the	n November 2010 field deli	naction and	data proported	
here was collected during the 2006 delineation. It is flagge				e November 2010 neid dein	leation and c	ala presented	
VEGETATION – Use scientific names of plant	·e						
VEGETATION — Ose scientific fiames of plant		Dominant	t Indicator	Dominance Test works	hoot:		
Tree Stratum (Plot size: 30 feet)	% Cover			Number of Dominant Spe			
1. Salix scouleriana	15%	Yes	FAC	That Are OBL, FACW, or		(A)	
2. Thuja plicata	15%	Yes	FAC	Total Number of Domina	nt		
Acer macrophyllum	5%	No	FACU	Species Across All Strata		(B)	
Pseudotsuga menziesii	<u>5%</u>	No	FACU	Percent of Dominant Spe	ries		
Sapling/Shrub Stratum (Plot size: 30' diameter)	40%	= Total C	Cover	That Are OBL, FACW, or		(A/B)	
Gaultheria shallon	70%	Yes	FACU	Prevalence Index works	sheet:		
Rhododedron macrophyllum	20%	Yes	<u>UPL</u>	Total % Cover of:	<u>Mu</u>	Itiply by:	
3. Rubus spectabilis	5%	No	FAC	OBL species			
4				FACW species			
5				FAC species			
Herb Stratum (Plot size: 30 feet)	95%	= Total C	Cover	FACU species			
1. Polystichum munitum	20%	Yes	FACU	UPL species			
Pteridium aquilinum	5%	No	FACU	Column Totals:	(A) _	(B)	
3. Juncus effusus	5%	No	FACW	Prevalence Index =	= B/A =		
4				Hydrophytic Vegetation	Indicators:		
5				☐ Dominance Test is >	50%		
6				Prevalence Index is			
7				☐ Morphological Adapta data in Remarks	ations¹ (Provi	de supporting	
8				☐ Wetland Non-Vascula		ate sheet)	
9				☐ Problematic Hydroph		on¹ (Explain)	
10				¹ Indicators of hydric soil a		,	
11				be present, unless distur			
Woody Vine Stratum (Plot size:)	30%	= Total C	Cover				
1. Rubus armeniacus	15%	Yes	FAC	Hydrophytic			
2. Rubus laciniatus	15%	Yes	FACU	Vegetation			
	30%			Present? Yes	□ No ⊠		
% Bare Ground in Herb Stratum 50%			F				
Remarks: The hydrophytic vegetation criterion is not met b	ecause ther	e is less th	nan 50% dor	minance by FAC.			

Depth	Matrix	%	Cala	Redo r (moist)	x Features	Type ¹	Loc ²	Toster	e	Domarka
(inches)	Color (moist)			r (moist)	<u></u> %	<u>rype</u>	LOC			Remarks
<u>0-16"</u>	10YR 5/4	100%	· —					gr sa lo	a	
		-								
	-	_						-		-
	oncentration, D=D						d Sand G			=Pore Lining, M=Matrix.
-	Indicators: (Appl	icable to a				d.)				oblematic Hydric Soils ³ :
Histosol	, ,			Sandy Redox (S					2 cm Muck (A	,
	oipedon (A2)			Stripped Matrix		(MI DA 4\	_	Red Parent M	, ,
☐ Black Hi	, ,			oamy Mucky M	, ,	(except	WLRA 1)		Other (Explair	in Remarks)
	n Sulfide (A4) d Below Dark Surfa	co (Δ11)		oamy Gleyed No Depleted Matrix	, ,					
	ark Surface (A12)	ice (ATT)		Redox Dark Sur	, ,			3lr	ndicators of hyd	ophytic vegetation and
	fucky Mineral (S1)			Depleted Dark S	, ,	')				ogy must be present,
•	Gleyed Matrix (S4)			Redox Depressi		,				ed or problematic.
	Layer (if present):	<u> </u>			(- /					
	ches):		_					Hydri	c Soil Present	P Yes □ No ⊠
	ne hydric soil criteri		_				£: -	11,741.	0 0011 1 1000111	
itemarks. II	ie riyuric son criteri	011 13 1101 11	iet bece	ause of the riigh	i CiliOilla Oi	1116 3011	oronie.			
HYDROLO	GY									
	drology Indicator	e.								
•	•		rad: aba	ok all that appl)				Cocondon, Indi	enters (2 or more required)
	cators (minimum o	one requi				(DO) (cators (2 or more required)
☐ Surface				☐ Water-Stai			cept MLF	RA		ned Leaves (B9) (MLRA 1, 2,
_	iter Table (A2)				A, and 4B)				4A, and	•
☐ Saturation	, ,			Salt Crust					☐ Drainage P	,
☐ Water M				☐ Aquatic Inv					☐ Dry-Seasor	Water Table (C2)
☐ Sedimer	nt Deposits (B2)			☐ Hydrogen \$, ,			☐ Saturation	Visible on Aerial Imagery (C9)
☐ Drift Dep	oosits (B3)			☐ Oxidized R	hizosphere	es along l	_iving Roo	ts (C3)	☐ Geomorphi	c Position (D2)
	200.10 (20)			☐ Drocopoo o	4 D a al a a al					
	at or Crust (B4)			☐ Fleselice C	or Reduced	l Iron (C4)		☐ Shallow Aq	uitard (D3)
☐ Algal Ma				Recent Iron				5)	☐ Shallow Aq	, ,
☐ Algal Ma☐ Iron Dep	at or Crust (B4)				n Reduction	n in Tilled	Soils (C6		☐ FAC-Neutra	, ,
☐ Algal Ma☐ Iron Dep☐ Surface	at or Crust (B4) posits (B5)	l Imagery (B7)	☐ Recent Iron	n Reduction Stressed F	n in Tilled Plants (D	Soils (C6		☐ FAC-Neutra	al Test (D5)
☐ Algal Ma☐ Iron Dep☐ Surface☐ Inundation	at or Crust (B4) posits (B5) Soil Cracks (B6)	• • • • • • • • • • • • • • • • • • • •	,	☐ Recent Iron☐ Stunted or	n Reduction Stressed F	n in Tilled Plants (D	Soils (C6		☐ FAC-Neutra	al Test (D5) Mounds (D6) (LRR A)
☐ Algal Ma☐ Iron Dep☐ Surface☐ Inundation	at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria v Vegetated Conca	• • • • • • • • • • • • • • • • • • • •	,	☐ Recent Iron☐ Stunted or	n Reduction Stressed F	n in Tilled Plants (D	Soils (C6		☐ FAC-Neutra	al Test (D5) Mounds (D6) (LRR A)
☐ Algal Ma☐ Iron Dep☐ Surface☐ Inundatio☐ Sparsely	at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria v Vegetated Conca	ve Surface	,	☐ Recent Iron☐ Stunted or	n Reduction Stressed F Iain in Rem	n in Tilled Plants (Danarks)	Soils (C6		☐ FAC-Neutra	al Test (D5) Mounds (D6) (LRR A)
☐ Algal Ma☐ Iron Dep☐ Surface☐ Inundatio☐ Sparsely Field Obser	at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria vegetated Conca vations: ter Present?	ve Surface	(B8) No ⊠	☐ Recent Iron ☐ Stunted or ☐ Other (Exp	n Reduction Stressed F lain in Rem	n in Tilled Plants (Danarks)	Soils (C6		☐ FAC-Neutra	al Test (D5) Mounds (D6) (LRR A)
☐ Algal Ma☐ Iron Dep☐ Surface☐ Inundatio☐ Sparsely Field Obser Surface Wate Water Table	at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria v Vegetated Conca vations: ter Present?	ve Surface Yes Yes Yes	No 🖂	Recent Iron Stunted or Other (Exp Depth (inches	n Reduction Stressed F Iain in Rem	n in Tilled Plants (Danarks)	Soils (C6		☐ FAC-Neutra ☐ Raised Ant ☐ Frost-Heav	al Test (D5) Mounds (D6) (LRR A) e Hummocks (D7)
☐ Algal Ma ☐ Iron Dep ☐ Surface ☐ Inundatio ☐ Sparsely Field Obser Surface Wat Water Table Saturation P	at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria v Vegetated Conca vations: ter Present?	ve Surface Yes Yes Yes	(B8) No ⊠	☐ Recent Iron ☐ Stunted or ☐ Other (Exp	n Reduction Stressed F Iain in Rem	n in Tilled Plants (Danarks)	Soils (C6		☐ FAC-Neutra	al Test (D5) Mounds (D6) (LRR A) e Hummocks (D7)
☐ Algal Ma ☐ Iron Dep ☐ Surface ☐ Inundatio ☐ Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca	at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria vegetated Conca vations: ter Present? Present?	ve Surface Yes Yes Yes Yes	(B8) No 🖾 No 🖾 No 🖾	Recent Iroi Stunted or Other (Exp Depth (inches Depth (inches	n Reduction Stressed F lain in Rem S): S):	n in Tilled Plants (Dr narks)	Soils (C6	and Hyc	FAC-Neutra Raised Ant Frost-Heav	al Test (D5) Mounds (D6) (LRR A) e Hummocks (D7)
☐ Algal Ma ☐ Iron Dep ☐ Surface ☐ Inundatio ☐ Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca	at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria vegetated Conca rvations: ter Present? Present? pillary fringe)	ve Surface Yes Yes Yes Yes	(B8) No 🖾 No 🖾 No 🖾	Recent Iroi Stunted or Other (Exp Depth (inches Depth (inches	n Reduction Stressed F lain in Rem S): S):	n in Tilled Plants (Dr narks)	Soils (C6	and Hyc	FAC-Neutra Raised Ant Frost-Heav	al Test (D5) Mounds (D6) (LRR A) e Hummocks (D7)
☐ Algal Ma☐ Iron Dep☐ Surface☐ Inundatio☐ Sparsely Field Obser Surface Wat Water Table Saturation P (includes can Describe Re	at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria vegetated Conca rvations: ter Present? Present? pillary fringe)	Yes	No 🖾 No 🖾 No 🖾 monitori	Recent Iron Stunted or Other (Exp Depth (inches Depth (inches Depth (inches	n Reduction Stressed F lain in Rem s): s): photos, pre	n in Tillec Plants (D' narks)	Wetl pections),	and Hyo	FAC-Neutra Raised Ant Frost-Heav	al Test (D5) Mounds (D6) (LRR A) e Hummocks (D7)
☐ Algal Ma☐ Iron Dep☐ Surface☐ Inundatio☐ Sparsely Field Obser Surface Wat Water Table Saturation P (includes can Describe Re	at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria vegetated Conca vations: ter Present? Present? Present? pillary fringe) corded Data (strea	Yes	No 🖾 No 🖾 No 🖾 monitori	Recent Iron Stunted or Other (Exp Depth (inches Depth (inches Depth (inches	n Reduction Stressed F lain in Rem s): s): photos, pre	n in Tillec Plants (D' narks)	Wetl pections),	and Hyo	FAC-Neutra Raised Ant Frost-Heav	al Test (D5) Mounds (D6) (LRR A) e Hummocks (D7)
☐ Algal Ma☐ Iron Dep☐ Surface☐ Inundatio☐ Sparsely Field Obser Surface Wat Water Table Saturation P (includes can Describe Re	at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria vegetated Conca vations: ter Present? Present? Present? pillary fringe) corded Data (strea	Yes	No 🖾 No 🖾 No 🖾 monitori	Recent Iron Stunted or Other (Exp Depth (inches Depth (inches Depth (inches	n Reduction Stressed F lain in Rem s): s): photos, pre	n in Tillec Plants (D' narks)	Wetl pections),	and Hyo	FAC-Neutra Raised Ant Frost-Heav	al Test (D5) Mounds (D6) (LRR A) e Hummocks (D7)
☐ Algal Ma☐ Iron Dep☐ Surface☐ Inundatio☐ Sparsely Field Obser Surface Wat Water Table Saturation P (includes can Describe Re	at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria vegetated Conca vations: ter Present? Present? Present? pillary fringe) corded Data (strea	Yes	No 🖾 No 🖾 No 🖾 monitori	Recent Iron Stunted or Other (Exp Depth (inches Depth (inches Depth (inches	n Reduction Stressed F lain in Rem s): s): photos, pre	n in Tillec Plants (D' narks)	Wetl pections),	and Hyo	FAC-Neutra Raised Ant Frost-Heav	al Test (D5) Mounds (D6) (LRR A) e Hummocks (D7)

Applicant/Owner: <u>Edward Rose and Sons</u> Investigator(s): <u>J. Bartlett</u>				State: WA	Committee Deints TII 4C A
Investigator(s): I Partlett			Sampling Point: TH 16-A		
investigator(s). <u>J. Bartiett</u>			Section, To	ownship, Range: <u>S 10 & 11</u>	, T 26 N, R 1E.
Landform (hillslope, terrace, etc.): terrace		Local relie	ef (concave,	, convex, none): undulating	Slope (%): <u>5%</u>
Subregion (LRR): MLRA 2	Lat:			Long:	Datum:
Soil Map Unit Name: 41 Poulsbo gravelly sandy loam, 15-30%	% slopes			NWI classificat	ion: <u>UPL</u>
Are climatic / hydrologic conditions on the site typical for this	ime of yea	ır? Yes ⊠	No □ (I	f no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology signif	icantly dist	turbed?	Are "No	ormal Circumstances" pres	ent? Yes ⊠ No □
Are Vegetation, Soil, or Hydrology natura	ally probler	matic?	(If need	ed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS – Attach site map s	howing	samplin	g point le	ocations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes ☐ No ☒		le th	e Sampled	Aroa	
Hydric Soil Present? Yes ☐ No ☒			e Sampled in a Wetlar) M
Wetland Hydrology Present? Yes ☐ No ☒				_	_
Remarks: Northwest corner of the upland island in the midd dominated mainly by shrub vegetation.	e of Wetla	nd A. Upla	and is forest	ted but the sample area is v	within a canopy opening so is
VEGETATION – Use scientific names of plants	S.				
				Dominance Test works	heet:
Tree Stratum (Plot size: 30 feet) 1		Species?		Number of Dominant Spe That Are OBL, FACW, or	ecies r FAC: <u>1</u> (A)
2				Total Number of Domina	nt
3				Species Across All Strata	a: <u>2</u> (B)
4				Percent of Dominant Spe	
Sapling/Shrub Stratum (Plot size: 30' diameter)		= Total C	over	That Are OBL, FACW, or	r FAC: <u>50%</u> (A/B)
1. Rubus spectabilis	50%	Yes	FAC	Prevalence Index works	sheet:
Vaccinium parvifolium	5%	No	<u>UPL</u>	Total % Cover of:	Multiply by:
3. Oemleria cerasiformes	5%	No	FACU	OBL species	x 1 =
4. <u>llex opaca</u>	5%	No	FACU	FACW species	
5					x 3 =
Herb Stratum (Plot size: 30 feet)	65%	= Total C	over		x 4 =
	30%	Yes	<u>FACU</u>	UPL species	
Dryopteris expansa				Column Totals:	(A) (B)
3				Prevalence Index :	= B/A =
4				Hydrophytic Vegetation	Indicators:
5				☐ Dominance Test is >	50%
6				☐ Prevalence Index is	3.0 ¹
7					ations ¹ (Provide supporting or on a separate sheet)
8				☐ Wetland Non-Vascul	ar Plants ¹
9 10				☐ Problematic Hydroph	nytic Vegetation ¹ (Explain)
11.				¹ Indicators of hydric soil abe present, unless distur	and wetland hydrology must bed or problematic.
Woody Vine Stratum (Plot size:)	35%	= Total C	over		·
1				Hydrophytic	
2				Vegetation Present? Yes	□ No ⊠
9/ Para Cround in Harb Stratum 65		= Total C	over		
% Bare Ground in Herb Stratum 65				50% dominance by FAC a	154004

Depth	Matrix			Redox Features			i ilic ab	301100	of malcators.
(inches)	Color (moist)	%	Colo	r (moist) %	Type ¹	Loc ²	Textur	<u>e</u>	Remarks
0-7"	10YR 3/3	100%					loam		
<u>7-16"</u>	10YR 4/3	100%					gr sa lo)	
			-				-		
1Type: C-C	oncontration D_D	onlotion D	M_Bod	uced Matrix, CS=Covered	or Coate		roino	21.0	cation: PL=Pore Lining, M=Matrix.
				s, unless otherwise note		u Sanu Gi			ors for Problematic Hydric Soils ³ :
☐ Histosol				Sandy Redox (S5)	,				m Muck (A10)
	pipedon (A2)			Stripped Matrix (S6)				_	Parent Material (TF2)
☐ Black His				_oamy Mucky Mineral (F1)	(except	MLRA 1)			er (Explain in Remarks)
	n Sulfide (A4)		□ L	oamy Gleyed Matrix (F2)					
	l Below Dark Surfa	ce (A11)		Depleted Matrix (F3)					
	rk Surface (A12)			Redox Dark Surface (F6)			3lr		ors of hydrophytic vegetation and
-	lucky Mineral (S1)			Depleted Dark Surface (F7	()				and hydrology must be present,
	leyed Matrix (S4) Layer (if present):		_ □ '	Redox Depressions (F8)				unies	ss disturbed or problematic.
	-1 X:		_				l la calui		I December 1
. `	ches):						Hyari	C 501	I Present? Yes ☐ No ⊠
Remarks: Tr	ne hydric soil criteri	on is not m	net beca	ause of the high chroma o	the soil	profile.			
HYDROLO	GY								
•	drology Indicator								
	cators (minimum of	f one requi	red; che						ndary Indicators (2 or more required)
Surface \				☐ Water-Stained Leave	s (B9) (e :	cept MLF	RA	□ W	Vater-Stained Leaves (B9) (MLRA 1, 2,
_	ter Table (A2)			1, 2, 4A, and 4B)				_	4A, and 4B)
☐ Saturation	, ,			Salt Crust (B11)				_	Prainage Patterns (B10)
☐ Water M				Aquatic Invertebrates					Ory-Season Water Table (C2)
	t Deposits (B2)			Hydrogen Sulfide Odd					Saturation Visible on Aerial Imagery (C9)
	oosits (B3)			Oxidized Rhizosphere	_	_	ts (C3)		Geomorphic Position (D2)
_	t or Crust (B4)			☐ Presence of Reduced					Shallow Aquitard (D3)
	osits (B5)			Recent Iron Reductio		,	,		AC-Neutral Test (D5)
	Soil Cracks (B6)		D-7\	Stunted or Stressed F		I) (LRR A))		Raised Ant Mounds (D6) (LRR A)
	on Visible on Aerial	• • • • • • • • • • • • • • • • • • • •	,	Other (Explain in Ren	narks)			ШΕ	rost-Heave Hummocks (D7)
	Vegetated Conca	ve Surrace	(B8)			<u> </u>			
Field Obser		V □	Na M	Danth (inches)					
Surface Wat			No ⊠	Depth (inches):					
Water Table			No 🖂	Depth (inches):					
Saturation P (includes cap		Yes 🗌	No 🛚	Depth (inches):		Wetl	and Hyd	irolog	gy Present? Yes □ No ⊠
		ım gauge.	monitor	ing well, aerial photos, pre	vious ins	pections).	if availa	ble:	
	(0 00	J 90,		5 - 2 , 2.2.1.2. E.1.0100; b10		, , ,	3.13		
Remarks: No	hvdrology presen	it and no w	etland l	nydrology indicators were	observed	during the	e field vic	sits	
romano. N	, Grology prosen	aa 110 W	Juanu I	., arology maloutors were	-2001 VCC	. samig til	J HOIG VIC		

Project/Site: Bond Road/SR 305		City/Cour	nty: <u>Poulsbo,</u>	Kitsap	Sampling Date: 11/2010 6-2016
Applicant/Owner: Edward Rose and Sons				Sampling Point: TH 17-A	
Investigator(s): <u>J. Bartlett</u>			_ Section, To	ownship, Range: <u>S 10 & 1</u>	1, T 26 N, R 1E.
Landform (hillslope, terrace, etc.): hillslope		Local re	lief (concave,	, convex, none): undulatin	g Slope (%): <u>5%</u>
Subregion (LRR): MLRA 2	Lat:			Long:	Datum:
Soil Map Unit Name: 41 Poulsbo gravelly sandy loam, 15-30					
Are climatic / hydrologic conditions on the site typical for this					
Are Vegetation, Soil, or Hydrology sign	-			ormal Circumstances" pres	
Are Vegetation, Soil, or Hydrology natu				ed, explain any answers in	
SUMMARY OF FINDINGS – Attach site map					
Lhudranhutia Vasatetiaa Daasant					
Hydrophytic Vegetation Present? Yes ⊠ No ☐ Hydric Soil Present? Yes ⊠ No ☐			the Sampled		_
Wetland Hydrology Present? Yes ⊠ No □		wit	thin a Wetlar	nd? Yes⊠ N	0 🗌
Remarks: Wetland area just northwest of the upland island an area that has a canopy opening so is dominated by shr	rubs.	A-51. Sim	ilar vegetatio	n conditions as observed	at Test Hole 16-A as it is within
VEGETATION – Use scientific names of plan					
Tree Stratum (Plot size: 30 feet) 1	% Cover	Species	nt Indicator	Number of Dominant Sp That Are OBL, FACW, o	pecies
2				Total Number of Domina Species Across All Stra	
4			<u> </u>	Percent of Dominant Sp That Are OBL, FACW, o	pecies or FAC: <u>67%</u> (A/B)
Sapling/Shrub Stratum (Plot size: 30' diameter)	500/	V	E40	Prevalence Index worl	rohooti
1. Rubus spectabilis			FAC FACU		Multiply by:
2. <u>llex opaca</u> 3					x 1 =
4					x 2 =
5					x 3 =
	55%			FACU species	x 4 =
Herb Stratum (Plot size: 30 feet)				UPL species	x 5 =
1. Polystichum munitum	20%	Yes Yes	<u>FACU</u>	Column Totals:	(A) (B)
2. Athyrium filix-femina		Yes No.	FAC FACU	Prevalence Index	= B/A =
Rubus ursinus 4				Hydrophytic Vegetation	
5					>50%
6.				☐ Prevalence Index is	3.0 ¹
7.					stations ¹ (Provide supporting sor on a separate sheet)
8				☐ Wetland Non-Vascu	
9					hytic Vegetation ¹ (Explain)
10					and wetland hydrology must
11				be present, unless distu	
Woody Vine Stratum (Plot size:)	50%			Hydronhytic	
1 2				Hydrophytic Vegetation	
% Bare Ground in Herb Stratum 50%				Present? Yes	s ⊠ No □
Remarks: Hydrophytic vegetation criterion is met because	there is are	ater than	50% cover b	y FAC plant species. Sku	nk cabbage was visible in other
locations of this wetland with none observed in this area p					-

Profile De	scription: (Descri	be to the d	epth ne	eded to docun	nent the i	ndicator	or confir	m the ab	sence	of indicators.)
Depth	Matrix				x Features			_		
(inches)	Color (moist)	%		r (moist)	<u></u> %	Type ¹	Loc ²	<u>Textu</u>	re	Remarks
0-9"	10YR 3/1	100%						loam		-
<u>9-16"</u>	10YR 3/2	85%	<u>10 Y</u>	R 4/6	15%	<u>C</u>	<u>M</u>	gr sa le	0	mottles few but prominent
	<u> </u>									
	<u> </u>									
									,	
-	-				-		-			
¹Type: C=	Concentration, D=D	Depletion, R	M=Redi	uced Matrix. CS	S=Covered	d or Coate	ed Sand G	Grains.	² Lo	cation: PL=Pore Lining, M=Matrix.
	il Indicators: (App			•						ors for Problematic Hydric Soils ³ :
Histoso	ol (A1)		⊠ 5	Sandy Redox (S	55)] 2 cm	n Muck (A10)
☐ Histic E	Epipedon (A2)			Stripped Matrix (Red	Parent Material (TF2)
☐ Black H	Histic (A3)			oamy Mucky M	lineral (F1) (except	MLRA 1)) [Othe	er (Explain in Remarks)
	gen Sulfide (A4)			oamy Gleyed N						
	ed Below Dark Surf	ace (A11)		Depleted Matrix						
	Dark Surface (A12)			Redox Dark Sur	` ,			³ l		ors of hydrophytic vegetation and
	Mucky Mineral (S1)			Depleted Dark S	•	7)				and hydrology must be present,
	Gleyed Matrix (S4)		∐ F	Redox Depressi	ons (F8)				unles	ss disturbed or problematic.
	e Layer (if present									
1	Santan N		_					l la calm	.:- 0-:1	Dragging Vos M. No D
	inches):		_					_		Present? Yes 🛛 No 🗌
Remarks:	The hydric soil crite	rion is met t	ecause	the soil profile	has chara	acteristics	for hydric	soil indi	cator S	55.
HYDROL	OGY									
Wetland H	lydrology Indicato	rs:								
Primary Inc	dicators (minimum d	of one requi	red; che	eck all that apply	y)				Seco	ndary Indicators (2 or more required)
☐ Surface	e Water (A1)			☐ Water-Stair	ned Leave	es (B9) (e	xcept ML	.RA	□ w	/ater-Stained Leaves (B9) (MLRA 1, 2,
	/ater Table (A2)			1, 2, 4	, and 4B)) , , ,	•			4A, and 4B)
☐ Satura				☐ Salt Crust (-				□ D	rainage Patterns (B10)
☐ Water	Marks (B1)			☐ Aquatic Inv	ertebrates	s (B13)				ry-Season Water Table (C2)
☐ Sedime	ent Deposits (B2)			☐ Hydrogen S						aturation Visible on Aerial Imagery (C9)
	eposits (B3)			☐ Oxidized R			Living Ro	ots (C3)		eomorphic Position (D2)
	flat or Crust (B4)			☐ Presence o		_	-	` ,		hallow Aquitard (D3)
_	eposits (B5)			☐ Recent Iron				6)		AC-Neutral Test (D5)
	e Soil Cracks (B6)			☐ Stunted or			•	•		aised Ant Mounds (D6) (LRR A)
	tion Visible on Aeria	al Imagery (B7)	Other (Exp			, ,	,		rost-Heave Hummocks (D7)
	ly Vegetated Conc	• • •	,	_ ` .		,				,
Field Obse	ervations:		` '							
Surface Wa	ater Present?	Yes 🗌	No 🛛	Depth (inches):					
Water Tab	le Present?		No 🗆	Depth (inches						
Saturation			No 🗆	Depth (inches			Wet	tland Hv	droloa	y Present? Yes ⊠ No □
(includes c	apillary fringe)									
Describe R	Recorded Data (stre	am gauge, i	monitor	ıng well, aerial p	onotos, pr	evious ins	spections)), if availa	able:	
Remarks: I	Hydrology present a	as soil satur	ation wi	thin 10 inches o	of the soil	surface				
Tromano. I	., 3, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5,	ac con calar	~ WI	10 11101103		2311400.				
1										

Project/Site: Bond Road/SR 305	(City/County	: Poulsbo, I	Kitsap	Sampling Date: 6/2016		
Applicant/Owner: Edward Rose and Sons				State: WA	Sampling Point: TH 1-B		
Investigator(s): <u>J. Bartlett</u>			Section, To	wnship, Range: <u>S 10 & 11, T 26 N, R 1E.</u>			
Landform (hillslope, terrace, etc.): hillslope		Local relie	f (concave,	convex, none): sloping	Slope (%): <u>5%</u>		
Subregion (LRR): MLRA 2	_ Lat:			Long:	Datum:		
Soil Map Unit Name: 39 Poulsbo gravelly sandy loam, 0-6%							
Are climatic / hydrologic conditions on the site typical for this					-		
Are Vegetation, Soil, or Hydrology sign	-			ormal Circumstances" pres	ent? Yes⊠ No□		
Are Vegetation, Soil, or Hydrology natu				ed, explain any answers in			
SUMMARY OF FINDINGS – Attach site map						c.	
Liverage via Vagatation Present?							
Hydrophytic Vegetation Present? Yes ☐ No ☐ Hydric Soil Present? Yes ☐ No ☐ Yes ☐ No ☐ N			e Sampled				
Wetland Hydrology Present? Yes ☐ No ☒		with	in a Wetlan	nd? Yes ☐ No) 🛚		
Remarks: Upland area on the east side of the stream flowing	ng through V	Vetland B,	which lies a	along the west edge of the	project site.		
VEGETATION – Use scientific names of plant	ts.						
	Absolute			Dominance Test works	heet:		
Tree Stratum (Plot size: 30' diameter) 1	% Cover			Number of Dominant Spe That Are OBL, FACW, or			
2				Total Number of Domina	nt		
3				Species Across All Strata			
4				Percent of Dominant Spe	ecies		
Sapling/Shrub Stratum (Plot size: 30' diameter)		= Total C	over	That Are OBL, FACW, or		ŕ	
1. Rubus spectabilis	15%	Yes	FAC	Prevalence Index works	sheet:		
Oemleria cerasiformis				Total % Cover of:	Multiply by:		
3.				OBL species	x 1 =		
4				FACW species	x 2 =		
5				FAC species	x 3 =		
	20%				x 4 =		
Herb Stratum (Plot size: 30 feet)	500 /	V	EACH		x 5 =		
	50%			Column Totals:	(A) (B))	
2				Prevalence Index :	= B/A =		
4				Hydrophytic Vegetation	<u></u>		
5				☐ Dominance Test is >			
6				☐ Prevalence Index is	3.0 ¹		
7.					ations ¹ (Provide supporting		
8					or on a separate sheet)		
9				☐ Wetland Non-Vascul			
10				_ , ,	nytic Vegetation ¹ (Explain) and wetland hydrology must		
11				be present, unless distur			
Manda Vina Chartura (Diet sine)	50%	= Total C	over				
Woody Vine Stratum (Plot size:) 1. Rubus armeniacus	15%	Voc	EAC	Hydrophytic			
	1370	162	IAC	Vegetation			
2	15%	= Total C	over	Present? Yes	□ No ⊠		
% Bare Ground in Herb Stratum							
Remarks: Hydrophytic vegetation criterion is not met becar	use there is	not greater	than 50%	dominance by FAC species			

Profile Des Depth	cription: (Descrit Matrix		lepth n	eeded to document the indicator or on the Redox Features	confirm	the absence of indicators.)
(inches)	Color (moist)	%	Cole	or (moist) % Type ¹ L	oc ²	Texture Remarks
0-3"	10YR 2/2	100%			<u>!</u>	oam
3-16"	10YR 4/3	100%				gr sa loam
	-					
	-					
				duced Matrix, CS=Covered or Coated S	Sand Gra	
Hydric Soil	Indicators: (App	licable to	all LRF	Rs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
Histosol	, ,			Sandy Redox (S5)		2 cm Muck (A10)
	oipedon (A2)			Stripped Matrix (S6)	D 4 4)	Red Parent Material (TF2)
	istic (A3)			Loamy Mucky Mineral (F1) (except ML	_RA 1)	☐ Other (Explain in Remarks)
	en Sulfide (A4)	200 (011)		Loamy Gleyed Matrix (F2)		
	d Below Dark Surfa ark Surface (A12)	ace (ATT)		Depleted Matrix (F3) Redox Dark Surface (F6)		³ Indicators of hydrophytic vegetation and
	Aucky Mineral (S1)			Depleted Dark Surface (F7)		wetland hydrology must be present,
	Bleyed Matrix (S4)			Redox Depressions (F8)		unless disturbed or problematic.
	Layer (if present)	:				<u>'</u>
Type:						
Depth (ir	nches):					Hydric Soil Present? Yes ☐ No ⊠
Remarks: T	he hydric soil criter	ion is not r	met hec	ause of the high chroma of the soil prof	file	
	•					
HYDROLO	ACV					
	rdrology Indicator	·e•				
•	cators (minimum o		ired; ch	eck all that apply)		Secondary Indicators (2 or more required)
Surface	Water (A1)	-		☐ Water-Stained Leaves (B9) (exce	pt MLRA	Mater-Stained Leaves (B9) (MLRA 1, 2,
	ater Table (A2)			1, 2, 4A, and 4B)	•	4A, and 4B)
☐ Saturati				☐ Salt Crust (B11)		☐ Drainage Patterns (B10)
☐ Water M	larks (B1)			Aquatic Invertebrates (B13)		☐ Dry-Season Water Table (C2)
☐ Sedime	nt Deposits (B2)			☐ Hydrogen Sulfide Odor (C1)		☐ Saturation Visible on Aerial Imagery (C9)
☐ Drift De	posits (B3)			Oxidized Rhizospheres along Livin	ng Roots	(C3) Geomorphic Position (D2)
☐ Algal Ma	at or Crust (B4)			☐ Presence of Reduced Iron (C4)		☐ Shallow Aquitard (D3)
☐ Iron Dep	oosits (B5)			☐ Recent Iron Reduction in Tilled So	oils (C6)	☐ FAC-Neutral Test (D5)
☐ Surface	Soil Cracks (B6)			☐ Stunted or Stressed Plants (D1) (I	LRR A)	Raised Ant Mounds (D6) (LRR A)
☐ Inundati	on Visible on Aeria	l Imagery	(B7)	☐ Other (Explain in Remarks)		☐ Frost-Heave Hummocks (D7)
☐ Sparsel	y Vegetated Conca	ve Surface	e (B8)			
Field Obse	rvations:					
Surface Wa	ter Present?	Yes 🗌	No 🛛	Depth (inches):		
Water Table	Present?	Yes 🗌	No 🛛	Depth (inches):		
Saturation F		Yes 🗌	No 🛛	Depth (inches):	Wetla	nd Hydrology Present? Yes ☐ No ⊠
	pillary fringe)					
Describe Re	ecorded Data (strea	am gauge,	monito	ring well, aerial photos, previous inspec	ctions), if	available:
Remarks: N	o hydrology prese	nt and no w	vetland	hydrology indicators.		
Nomano. N	o nyarology preser	it did 110 V	, o dal lu	nyarology maioatolo.		

Project/Site: Bond Road/SR 305		City/Co	ounty: <u>Poulsbo,</u>	Kitsap	Sampling Date: 11/2010 6-2016		
Applicant/Owner: Edward Rose and Sons				State: WA	WA Sampling Point: TH 2-B		
Investigator(s): <u>J. Bartlett</u>			Section, To	ownship, Range: <u>S 10 & 11</u>	, T 26 N, R 1E.		
Landform (hillslope, terrace, etc.): hillslope		Local	relief (concave,	, convex, none): sloping	Slope (%): <u>5%</u>		
Subregion (LRR): MLRA 2	Lat:			Long:	Datum:		
Soil Map Unit Name: 39 Poulsbo gravelly sandy loam, 0-6%							
Are climatic / hydrologic conditions on the site typical for thi							
Are Vegetation, Soil, or Hydrology sig	-			ormal Circumstances" pres	ent? Yes⊠ No □		
Are Vegetation, Soil, or Hydrology natu				ed, explain any answers in			
SUMMARY OF FINDINGS – Attach site map							
Hydrophytic Vegetation Present? Yes ⊠ No □							
Hydric Soil Present? Yes ☐ No ☒			Is the Sampled		57		
Wetland Hydrology Present? Yes ☐ No ☒		'	within a Wetlar	nd? Yes ☐ No			
Remarks: Upland area along stream that contains standin lacks hydric soils and wetland hydrology indicators. The u							
VEGETATION – Use scientific names of plan	ıts.						
Tree Stratum (Plot size: 30' diameter)	% Cover	Spec	nant Indicator ies? Status	Dominance Test works Number of Dominant Sp	ecies		
1			<u> </u>	That Are OBL, FACW, or Total Number of Domina	nt		
3				Species Across All Strata	a: <u>4</u> (B)		
4				Percent of Dominant Spe That Are OBL, FACW, or	ecies r FAC: <u>75%</u> (A/B)		
Rubus spectabilis	10%	Yes	FAC	Prevalence Index work	sheet:		
2.				Total % Cover of:	Multiply by:		
3				OBL species	x 1 =		
4				FACW species	x 2 =		
5					x 3 =		
Herb Stratum (Plot size: 30' diameter)	10%	= Tot	tal Cover	· ·	x 4 =		
1. Polystichum munitum	35%	Yes	FACU		x 5 =		
Ranunculus repens		Yes	FAC	Column Totals:	(A) (B)		
Tolmeia menziesii		No		Prevalence Index	= B/A =		
4. Athyrium filix-femina	· ·			Hydrophytic Vegetation	n Indicators:		
5. Carex obnupta	5%				50%		
6				☐ Prevalence Index is			
7					ations ¹ (Provide supporting or on a separate sheet)		
8				☐ Wetland Non-Vascul			
9					nytic Vegetation ¹ (Explain)		
10					and wetland hydrology must		
11				be present, unless distur			
Woody Vine Stratum (Plot size:)	105%	= Tot	tal Cover				
1. Rubus armeniacus 2.		Yes	<u>FAC</u>	Hydrophytic Vegetation			
% Bare Ground in Herb Stratum	5%	= Tot	tal Cover		⊠ No □		
Remarks: The hydrophytic vegetation criterion is met beca	ause there is	greate	er than 50% don	ninance by FAC species.			

Profile Desc	cription: (Describe	to the de	pth needed to docu	ument the	indicator	or confirm	n the ab	sence	of indicators.)
Depth	Matrix			lox Feature					
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Textu	re	Remarks
<u>0-16"</u>	10YR 3/3	90%	10 YR 4/4	10%	D	M	sandy	loam	faint mottles
			-						
-	-								
			-						
·									
· 									
			M=Reduced Matrix, C			ed Sand G	rains.	² Lo	cation: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applic	cable to a	I LRRs, unless oth	erwise not	ed.)		Ir	dicato	ors for Problematic Hydric Soils ³ :
☐ Histosol	(A1)		☐ Sandy Redox	(S5)] 2 cm	Muck (A10)
☐ Histic Ep	ipedon (A2)		☐ Stripped Matrix	x (S6)					Parent Material (TF2)
☐ Black His			☐ Loamy Mucky	Mineral (F	1) (excep	MLRA 1)] Othe	er (Explain in Remarks)
_ , .	n Sulfide (A4)		☐ Loamy Gleyed	,	2)				
	Below Dark Surfac	e (A11)	Depleted Matri						
	rk Surface (A12)		☐ Redox Dark S	, ,			³ l		ors of hydrophytic vegetation and
-	lucky Mineral (S1)		Depleted Dark	,	7)				and hydrology must be present,
	leyed Matrix (S4)		☐ Redox Depres	sions (F8)				unles	s disturbed or problematic.
Restrictive	Layer (if present):								
Type:			_						
Depth (in	ches):		=				Hydr	ic Soil	Present? Yes ☐ No ⊠
Remarks: Th	ne soil matrix chrom	a is too hig	h even with mottles	so the prof	ile meets	none of the	e listed h	nydric s	soil indicators.
HYDROLO	GY								
Wetland Hy	drology Indicators	:							
			ed; check all that ap	olv)				Seco	ndary Indicators (2 or more required)
Surface	•		☐ Water-Sta		es (R9) (e	xcent MI F			/ater-Stained Leaves (B9) (MLRA 1, 2,
	ter Table (A2)			1A, and 4B		xoopt iiiLi		<u></u>	4A, and 4B)
☐ Saturation			□ Salt Crus		')				rainage Patterns (B10)
	` '		_	, ,	o (D12)				, ,
☐ Water M	, ,		☐ Aquatic Ir		. ,				ry-Season Water Table (C2)
	t Deposits (B2)		☐ Hydroger						aturation Visible on Aerial Imagery (C9)
-	osits (B3)			Rhizosphe	_	•	ots (C3)		eomorphic Position (D2)
_	t or Crust (B4)			of Reduce	•	•			hallow Aquitard (D3)
-	osits (B5)			on Reducti		,	•		AC-Neutral Test (D5)
☐ Surface	Soil Cracks (B6)		☐ Stunted o	r Stressed	Plants (D	1) (LRR A)		aised Ant Mounds (D6) (LRR A)
☐ Inundation	on Visible on Aerial	lmagery (E	37) 🗌 Other (Ex	plain in Re	marks)			□ F	rost-Heave Hummocks (D7)
☐ Sparsely	Vegetated Concav	e Surface	(B8)						
Field Obser	vations:								
Surface Wat	er Present?	res⊠ N	lo 🗌 Depth (inche	es): <u>2"</u>					
Water Table	Present?	∕es □ N	lo Depth (inche	es):					
Saturation P	resent?	∕es □ N	lo Depth (inche			Wet	land Hv	droloa	y Present? Yes □ No ⊠
(includes cap			.е 🗀 — эерин (шен						,
Describe Re	corded Data (strean	n gauge, m	nonitoring well, aeria	l photos, p	revious in	spections),	if availa	ble:	
Remarks: H	/drology present as	standing v	vater to a depth of 2'	due to str	eam flood	ing and on	ly durino	winter	months. Water not present during April
			tland delineation ve			5			, 3.4

Project/Site: Bond Road/SR 305	(City/County	y: <u>Poulsbo,</u>	Kitsap	Sampling Date: 11-2010 6-2016		
Applicant/Owner: Edward Rose and Sons				State: WA	Sampling Point: TH 3-B		
Investigator(s): <u>J. Bartlett</u>			Section, To	ownship, Range: <u>S 10 & 11</u>	, T 26 N, R 1E.		
Landform (hillslope, terrace, etc.): hillslope		Local relie	ef (concave,	convex, none): concave	Slope (%): <u>5%</u>		
Subregion (LRR): MLRA 2	_ Lat:			Long:	Datum:		
Soil Map Unit Name: 39 Poulsbo gravelly sandy loam, 0-6%							
Are climatic / hydrologic conditions on the site typical for this							
Are Vegetation, Soil, or Hydrology sign	-			ormal Circumstances" prese	ent? Yes ⊠ No □		
Are Vegetation, Soil, or Hydrology natu				ed, explain any answers in			
SUMMARY OF FINDINGS – Attach site map							
Hadaaladia Vaastalia Baassa Vaa 🗆 Na 🖂							
Hydrophytic Vegetation Present? Yes ☐ No ☐ Hydric Soil Present? Yes ☐ No ☐ Yes ☐ No ☐ N			e Sampled				
Wetland Hydrology Present? Yes □ No ☒		with	in a Wetlar	nd? Yes ☐ No) 🛮		
Remarks: Upland on the east side of Wetland B and Test I	Hole 2-B.						
VEGETATION – Use scientific names of plant	ts.						
	Absolute			Dominance Test works	heet:		
Tree Stratum (Plot size: 30' diameter) 1	% Cover			Number of Dominant Spe That Are OBL, FACW, or			
2				Total Number of Domina	nt		
3				Species Across All Strata	a: <u>7</u> (B)		
4				Percent of Dominant Spe			
Sapling/Shrub Stratum (Plot size: 30' diameter)		= Total C	over	That Are OBL, FACW, or	r FAC: <u>29%</u> (A/B)		
1. Corylus cornuta	10%	Yes	FACU	Prevalence Index works	sheet:		
2. Rubus spectabilis	5%	Yes	FAC	Total % Cover of:	Multiply by:		
Vaccinium parvifolium	5%	Yes	FACU	OBL species	x 1 =		
4. Rubus parviflorus	5%	Yes	FACU	FACW species			
5				*	x 3 =		
Herb Stratum (Plot size: 30 feet)	25%	= Total C	over		x 4 =		
1. Polystichum munitum	50%	Yes	FACU	Column Totals:	x 5 =		
2. Rubus ursinus		Yes	FACU	Column Totals.	(A) (B)		
3				Prevalence Index :	= B/A =		
4				Hydrophytic Vegetation	n Indicators:		
5				Dominance Test is >			
6				☐ Prevalence Index is			
7					ations ¹ (Provide supporting or on a separate sheet)		
8				☐ Wetland Non-Vascula			
9			-	☐ Problematic Hydroph	nytic Vegetation ¹ (Explain)		
10					and wetland hydrology must		
11		= Total C		be present, unless distur	bed or problematic.		
Woody Vine Stratum (Plot size:)	1070	- 101410	.0001				
1. Rubus armeniacus	10%	Yes	FAC	Hydrophytic			
2				Vegetation Present? Yes	□ No ⊠		
% Bare Ground in Herb Stratum 25	10%	= Total C	over				
Remarks: The hydrophytic vegetation criterion is not met b	ecause ther	e is less th	nan 50% doi	minance by FAC species.			
				,			

Depth	cription: (Descrit Matrix		eptn n	Redox Features	5		the absence of indicators.)
(inches)	Color (moist)	%	Cole		<u>Type¹ Lo</u>	oc ²	Texture Remarks
0-16"	10YR 4/3	100%					gr sa lo
					·		
				<u>-</u>	·		
					· 		
	-				·		
				duced Matrix, CS=Covered		and Gra	
-		licable to		Rs, unless otherwise note	ea.)		Indicators for Problematic Hydric Soils ³ :
Histosol	` '			Sandy Redox (S5)			2 cm Muck (A10)
	oipedon (A2)			Stripped Matrix (S6)) (avecut MI F	D A 4\	Red Parent Material (TF2)
	istic (A3)			Loamy Mucky Mineral (F1		KA 1)	Other (Explain in Remarks)
	en Sulfide (A4) d Below Dark Surfa	oco (Δ11)		Loamy Gleyed Matrix (F2) Depleted Matrix (F3)			
•	ark Surface (A12)	ice (ATT)		Redox Dark Surface (F6)			³ Indicators of hydrophytic vegetation and
	lucky Mineral (S1)			Depleted Dark Surface (F	7)		wetland hydrology must be present,
	Gleyed Matrix (S4)			Redox Depressions (F8)	.,		unless disturbed or problematic.
•	Layer (if present)	:					
	,						
,, <u> </u>	nches):						Hydric Soil Present? Yes ☐ No ☒
	,			ause of the high chroma c	of the soil profil	lo	.,
rtomants. H	ne riyune son cinci	1011 13 1101 1	iict bec	adde of the high chiloma c	n the son prom	ю.	
HYDROLC	GY						
Wetland Hy	drology Indicator	s:					
Primary Indi	cators (minimum o	f one requ	red; ch	eck all that apply)			Secondary Indicators (2 or more required)
☐ Surface	Water (A1)			☐ Water-Stained Leave	es (B9) (excep	t MLR	A Water-Stained Leaves (B9) (MLRA 1, 2,
☐ High Wa	ater Table (A2)			1, 2, 4A, and 4B))		4A, and 4B)
☐ Saturation	on (A3)			☐ Salt Crust (B11)			□ Drainage Patterns (B10)
☐ Water M	larks (B1)			☐ Aquatic Invertebrates	s (B13)		□ Dry-Season Water Table (C2)
☐ Sedime	nt Deposits (B2)			☐ Hydrogen Sulfide Od	or (C1)		☐ Saturation Visible on Aerial Imagery (C9)
☐ Drift Dep	posits (B3)			☐ Oxidized Rhizospher	es along Livin	g Roots	s (C3) Geomorphic Position (D2)
☐ Algal Ma	at or Crust (B4)			☐ Presence of Reduce	d Iron (C4)		☐ Shallow Aquitard (D3)
☐ Iron Dep	oosits (B5)			☐ Recent Iron Reduction	n in Tilled Soi	ls (C6)	☐ FAC-Neutral Test (D5)
	Soil Cracks (B6)			☐ Stunted or Stressed			Raised Ant Mounds (D6) (LRR A)
	on Visible on Aeria	l Imagery	(B7)	☐ Other (Explain in Rer	. , ,	,	Frost-Heave Hummocks (D7)
	y Vegetated Conca		. ,	_	,		
Field Obser							
Surface Wa	ter Present?	Yes □	No 🖂	Depth (inches):			
Water Table			No 🏻	Depth (inches):			
Saturation F						Wotla	and Hydrology Present? Yes ☐ No ⊠
	pillary fringe)	res 🗀	No 🛚	Depth (inches):		wella	and Hydrology Present? Yes ∐ No ⊠
		am gauge,	monito	ring well, aerial photos, pro	evious inspect	tions), it	if available:
Remarks: N	o hydrology or indi	cators of w	etland	hydrology present.			

Project/Site: Bond Road/SR 305		City/Count	Sampling Date: 11-20	10 6-2016		
Applicant/Owner: Edward Rose and Sons				State: WA	Sampling Point: TH 4-B	
Investigator(s): <u>J. Bartlett</u>			Section, To	ownship, Range: <u>S 10 & 11</u>	, T 26 N, R 1E.	
Landform (hillslope, terrace, etc.): hillslope		_ Local reli	ef (concave,	, convex, none): concave	Slope (%	6): <u>5%</u>
Subregion (LRR): MLRA 2						
Soil Map Unit Name: 39 Poulsbo gravelly sandy loam, 0-						
Are climatic / hydrologic conditions on the site typical for						
Are Vegetation, Soil, or Hydrology s	-				ent? Yes⊠ No⊡	
Are Vegetation, Soil, or Hydrology n				ed, explain any answers in		
SUMMARY OF FINDINGS – Attach site ma						es, etc.
Hydrophytic Vegetation Present? Yes ⊠ No [10.41	h a Camania d	1 4		
Hydric Soil Present? Yes ⊠ No [he Sampled	nd? Yes⊠ No	о П	
Wetland Hydrology Present? Yes ⊠ No [WILI	illi a vvetiai	iu: res 🖂 No	, L	
Remarks: Wetland B at south end on a terrace just abo 2016 revealed that Wetland B remains as it was delined		but at the t	base of the t	rough/shallow ravine. The	site visit conducted or	า 6-17-
VEGETATION – Use scientific names of pla	ants.					
Tree Stratum (Plot size: 30' diameter)			t Indicator ? Status	Dominance Test works Number of Dominant Spe		
1. Thuja plicata	20%	Yes	FAC	That Are OBL, FACW, or		(A)
2	_			Total Number of Domina	ınt	
3				Species Across All Strata		(B)
4				Percent of Dominant Spe	ecies	
Sapling/Shrub Stratum (Plot size: 30' diameter)	20%	= Total (Cover	That Are OBL, FACW, or		(A/B)
1. Rubus spectabilis	5%	Yes	FAC	Prevalence Index work	sheet:	
2. Sambucus racemoa	5%	Yes	FACU		Multiply by:	
3	_	·		OBL species		
4				FACW species		
5				FACILIAN SIGN		
Herb Stratum (Plot size: 30 feet)	10%	= Total (Jover	FACU species UPL species		
1. Athyrium filix femina	25%	Yes	FAC	Column Totals:		
2. Tolmeia menziesii		Yes	FAC	Column Fotals.	(//)	(5)
3. Lysichiton americanum	10%	No	OBL		= B/A =	
4. Equisetum arvense	5%	No	FAC	Hydrophytic Vegetation		
5. Polystichum munitum	5%	No	FACU	□ Dominance Test is > □ □		
6				☐ Prevalence Index is		
7				☐ Morphological Adapt data in Remarks	or on a separate shee	
8				☐ Wetland Non-Vascul		,
9				☐ Problematic Hydroph	nytic Vegetation ¹ (Expl	ain)
10.				¹ Indicators of hydric soil		/ must
11		= Total 0		be present, unless distur	bed or problematic.	
Woody Vine Stratum (Plot size:)	00 /0	= Total C	Joven			
1	_			Hydrophytic		
2	_			Vegetation Present? Yes	⊠ No □	
0/ Page Crayed in Hart Overlage 40		= Total C	Cover	103		
% Bare Ground in Herb Stratum <u>40</u> Remarks: The hydrophytic vegetation criterion was met	hacausa thara	ie arosto	than 500/ d	Iominance by EAC ansairs		
Tremains. The mydrophytic vegetation chienon was met	because mele	o greater	шан 50% Q	ionimance by FAC species		

Depth	Matrix				ox Feature		1 2	- :		Б
(inches)	Color (moist)	%	<u>Color</u>	(moist)	%	Type ¹	Loc ²	Textur	<u>e</u>	Remarks
0-16"	10YR 2/1	100%						sa loar	<u>n</u>	
					-					-
										<u></u>
1T C. C			M Dad	and Matrice C	C C				21	action. DI Dans Lining M Matrix
	oncentration, D=De Indicators: (Appl						ed Sand G			cation: PL=Pore Lining, M=Matrix. ors for Problematic Hydric Soils ³ :
☐ Histosol		icable to a				eu. <i>)</i>				n Muck (A10)
	oipedon (A2)			andy Redox (stripped Matrix					_	Parent Material (TF2)
☐ Black Hi				oamy Mucky I	, ,) (except	MLRA 1)	Ė		er (Explain in Remarks)
	n Sulfide (A4)			oamy Gleyed			,	_		(=-q-a
_ , ,	d Below Dark Surfa	ce (A11)		epleted Matrix	•	•				
	ark Surface (A12)		□R	ledox Dark Su	rface (F6)			³ ı	ndicato	ors of hydrophytic vegetation and
	lucky Mineral (S1)			epleted Dark		7)			wetla	and hydrology must be present,
	Sleyed Matrix (S4)		□R	Redox Depress	ions (F8)				unles	ss disturbed or problematic.
Restrictive	Layer (if present):	:								
Type:			_							
Depth (in	ches):		_					Hydr	ic Soil	l Present? Yes ⊠ No □
Remarks: Lo	ow chroma for soil i	matrix chro	ma and	meets hydric	soil indicat	or A12.				
HYDROLO	ac v									
-	drology Indicator			-lII th-t	LA				0	
	cators (minimum of	r one requi				(5.0) (ndary Indicators (2 or more required)
Surface				☐ Water-Sta			xcept MLF	RA	Ш М	/ater-Stained Leaves (B9) (MLRA 1, 2,
_	iter Table (A2)				A, and 4B)				4A, and 4B)
⊠ Saturation	` '			☐ Salt Crust	` '	(0.40)			_	rainage Patterns (B10)
☐ Water M				Aquatic In						ry-Season Water Table (C2)
	nt Deposits (B2)			☐ Hydrogen				. (00)		aturation Visible on Aerial Imagery (C9)
	posits (B3)			Oxidized F		_	_	ots (C3)		teomorphic Position (D2)
	at or Crust (B4)			☐ Presence				.,		hallow Aquitard (D3)
	osits (B5)			☐ Recent Iro			`	,		AC-Neutral Test (D5)
	Soil Cracks (B6)		D-7\	Stunted or			1) (LRR A))		aised Ant Mounds (D6) (LRR A)
_	on Visible on Aeria	0 , (,	☐ Other (Exp	piain in Re	marks)			шь	rost-Heave Hummocks (D7)
	Vegetated Conca	ve Sunace	(D0)							
Field Obser		·		5 4 6 1	,					
Surface Wat			No 🗌	Depth (inche	<i>,</i> —					
Water Table			No 🗌	Depth (inche						
Saturation P		Yes 🛚	No 🗌	Depth (inche	s): <u>to surfa</u>	ce	Wetl	and Hyd	drolog	y Present? Yes ⊠ No □
		ım gaude	monitori	ng well, aerial	photos n	evious ins	spections)	if availa	ble:	
(includes ca		iii gaago,		ng won, aonai	priotoo, pr	011000 1110	ροσιιστισ,,	ii avaiia	0.0.	
Describe Re	colded Data (Strea									
Describe Re	,	recent dur	ing field	visit with ovid	ance of ctr	am flood	ing indicat	ad by su	rfaco 1	scouring and/or hare surface in
Describe Re	etland hydrology p	resent duri	ing field	visit with evide	ence of str	eam flood	ing indicate	ed by su	rfaces	scouring and/or bare surface in
Describe Re Remarks: W	etland hydrology p	resent duri	ing field	visit with evide	ence of str	eam flood	ing indicat	ed by su	rface s	scouring and/or bare surface in
Describe Re	etland hydrology p	resent duri	ing field	visit with evide	ence of str	eam flood	ing indicat	ed by su	rface s	scouring and/or bare surface in

Project/Site: Bond Road/SR 305		City/County	Sampling Date: 11/2010 6-2016			
Applicant/Owner: Edward Rose and Sons				State: WA	Sampling Point: TH 5-B	
Investigator(s): <u>J. Bartlett</u>			Section, To	ownship, Range: <u>S 10 & 11</u>	, T 26 N, R 1E.	
Landform (hillslope, terrace, etc.): hillslope		Local relie	ef (concave	, convex, none): concave	Slope (%): <u>5%</u>	
Subregion (LRR): MLRA 2						
Soil Map Unit Name: 39 Poulsbo gravelly sandy loam, 0-6%						
Are climatic / hydrologic conditions on the site typical for thi					-	
Are Vegetation, Soil, or Hydrology sig				ormal Circumstances" pres	ent? Yes⊠ No□	
Are Vegetation, Soil, or Hydrology natu				ed, explain any answers in		
SUMMARY OF FINDINGS – Attach site map						
Hydrophytic Vegetation Present? Yes ☐ No ☒						
Hydric Soil Present? Yes ☐ No ☒			ne Sampled nin a Wetlar		. ⊠	
Wetland Hydrology Present? Yes ☐ No ☒		WILL	iiii a wellai	ild: Tes 🗌 No		
Remarks: Upland on slope of shallow trough above the te	rrace wetlan	d along ea	st side of st	ream.		
VEGETATION – Use scientific names of plan	ıts.					
Tree Stratum (Plot size: 30' diameter)	Absolute % Cover	Dominant Species?	Indicator	Dominance Test works		
1. Thuja plicata		Yes		Number of Dominant Sports Are OBL, FACW, or		
2. Alnus rubra				Total Number of Domina		
3		<u> </u>		Species Across All Strata		
4				Percent of Dominant Spe	aries	
Sapling/Shrub Stratum (Plot size: 30' diameter)	10%	= Total C	Cover		r FAC: <u>50</u> (A/B)	
1. Rubus spectabilis	10%	Yes	FAC	Prevalence Index work	sheet:	
2. Ilex opaca	10%	Yes	FACU	Total % Cover of:	Multiply by:	
Oemleria cerasiformis	5%	No	FACU	*	x 1 =	
4. Corylus cornuta		No	FACU	*	x 2 =	
5					x 3 =	
Herb Stratum (Plot size: 30 feet)	30%	= Total C	Cover		x 4 =	
1. Polystichum munitum	50%	Yes	FACU		x 5 =	
2. Rubus ursinus	000/		FACU	Column Totals.	(A) (B)	
3. Athyrium filix-femina		No	FAC	Prevalence Index	= B/A =	
4				Hydrophytic Vegetation	n Indicators:	
5				☐ Dominance Test is >	50%	
6				☐ Prevalence Index is		
7					ations ¹ (Provide supporting or on a separate sheet)	
8				☐ Wetland Non-Vascul		
9					nytic Vegetation ¹ (Explain)	
10				_ , ,	and wetland hydrology must	
11				be present, unless distur	bed or problematic.	
Woody Vine Stratum (Plot size:)	<u>75%</u>	= Total C	Cover			
1				Hydrophytic		
2				Vegetation		
		= Total C		Present? Yes	□ No ⊠	
% Bare Ground in Herb Stratum 25						
Remarks: The hydrophytic vegetation criterion is not met	because the	re is not gre	eater than 5	60% dominance by FAC, FA	ACW, and OBL species.	

	Matrix		-	Redox Features	or confirm the	,
Depth (inches)	Color (moist)	%	Color (moist)	<u>% Type¹</u>	Loc ² Tex	ture Remarks
0-3"	10YR 2/2	100%			loam	1
3-16"	10YR 4/4	100%			gr sa	a lo
			<u> </u>			
			- <u></u>			
			<u> </u>			
			<u> </u>			
¹Type: C=C	Concentration, D=D	epletion, R	M=Reduced Matri	x, CS=Covered or Coate	ed Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Appl	icable to	all LRRs, unless	otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
☐ Histosol	, ,		☐ Sandy Red	ox (S5)		☐ 2 cm Muck (A10)
	pipedon (A2)		☐ Stripped Ma	, ,		Red Parent Material (TF2)
	istic (A3)			cky Mineral (F1) (except	MLRA 1)	Other (Explain in Remarks)
	en Sulfide (A4) d Below Dark Surfa	co (A11)	☐ Loamy Gleg ☐ Depleted M			
	аrk Surface (А12)	ice (ATT)	•	Surface (F6)		³ Indicators of hydrophytic vegetation and
	Mucky Mineral (S1)			ark Surface (F7)		wetland hydrology must be present,
	Gleyed Matrix (S4)			ressions (F8)		unless disturbed or problematic.
Restrictive	Layer (if present)	1	<u> </u>			·
Type:						
Depth (ir	nches):				Ну	dric Soil Present? Yes □ No ⊠
Remarks: T	he hydric soil criter	on is not r	net because of the	high chroma of the soil	profile.	
UVDDOLG	NOV.					
HYDROLC	/drology Indicator	e.				
•	icators (minimum o		red: check all that	apply)		Secondary Indicators (2 or more required)
	Water (A1)	00		-Stained Leaves (B9) (ex	xcept MLRA	☐ Water-Stained Leaves (B9) (MLRA 1, 2,
	ater Table (A2)			2, 4A, and 4B)		, , ,
☐ Saturati				rust (B11)		4A. and 4B)
	flarks (B1)					4A, and 4B) ☐ Drainage Patterns (B10)
	` '			c Invertebrates (B13)		☐ Drainage Patterns (B10)
	nt Deposits (B2)		☐ Aquat	` '		□ Drainage Patterns (B10)□ Dry-Season Water Table (C2)
	nt Deposits (B2) posits (B3)		☐ Aquat	gen Sulfide Odor (C1)	Living Roots (C3	□ Drainage Patterns (B10)□ Dry-Season Water Table (C2)□ Saturation Visible on Aerial Imagery (C9)
☐ Drift De	nt Deposits (B2) posits (B3) at or Crust (B4)		☐ Aquat ☐ Hydro ☐ Oxidiz	` '		□ Drainage Patterns (B10)□ Dry-Season Water Table (C2)□ Saturation Visible on Aerial Imagery (C9)
☐ Drift De☐ Algal Ma	posits (B3)		☐ Aquat ☐ Hydro ☐ Oxidiz ☐ Prese	gen Sulfide Odor (C1) ed Rhizospheres along nce of Reduced Iron (C4	!)	 □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3)
☐ Drift De☐ Algal Ma	posits (B3) at or Crust (B4)		☐ Aquat ☐ Hydro ☐ Oxidiz ☐ Prese	gen Sulfide Odor (C1) ed Rhizospheres along	l) d Soils (C6)	 □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2)
☐ Drift De☐ Algal Ma☐ Iron De☐ Surface	posits (B3) at or Crust (B4) posits (B5)	l Imagery (☐ Aquat ☐ Hydro ☐ Oxidiz ☐ Prese ☐ Recer ☐ Stunte	gen Sulfide Odor (C1) ed Rhizospheres along nce of Reduced Iron (C4 at Iron Reduction in Tilled	l) d Soils (C6)	 □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5)
☐ Drift De☐ Algal Ma☐ Iron De☐ Surface☐ Inundati	posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6)	• •	☐ Aquat ☐ Hydro ☐ Oxidiz ☐ Prese ☐ Recer ☐ Stunte	gen Sulfide Odor (C1) ed Rhizospheres along nce of Reduced Iron (C4 at Iron Reduction in Tilled ad or Stressed Plants (D	l) d Soils (C6)	□ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A)
☐ Drift De☐ Algal Ma☐ Iron De☐ Surface☐ Inundati	posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca	• •	☐ Aquat ☐ Hydro ☐ Oxidiz ☐ Prese ☐ Recer ☐ Stunte	gen Sulfide Odor (C1) ed Rhizospheres along nce of Reduced Iron (C4 at Iron Reduction in Tilled ad or Stressed Plants (D	l) d Soils (C6)	□ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A)
☐ Drift De☐ Algal Ma☐ Iron De☐ Surface☐ Inundati☐ Sparsel☐	posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca	ve Surface	Aquat Hydro Oxidiz Prese Recer Stunte (B7) Other	gen Sulfide Odor (C1) ed Rhizospheres along nce of Reduced Iron (C4 at Iron Reduction in Tilled ad or Stressed Plants (D	l) d Soils (C6)	□ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A)
☐ Drift De☐ Algal Ma☐ Iron De☐ Surface☐ Inundati☐ Sparsel☐	posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca rvations: ter Present?	ve Surface	Aquat Hydro Oxidiz Prese Recer Stunte (B7) Other	gen Sulfide Odor (C1) ed Rhizospheres along nce of Reduced Iron (C4 at Iron Reduction in Tilled ed or Stressed Plants (De) (Explain in Remarks)	l) d Soils (C6)	□ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A)
☐ Drift De☐ Algal Ma☐ Iron De☐ Surface☐ Inundati☐ Sparse☐ Field Obse	posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca rvations: tter Present?	ve Surface Yes Yes Yes	Aquat Hydro Oxidiz Prese Recer Stunte (B7) Other (B8) No Depth (in	gen Sulfide Odor (C1) ed Rhizospheres along nce of Reduced Iron (C4 at Iron Reduction in Tilled ed or Stressed Plants (De (Explain in Remarks)	d Soils (C6) 1) (LRR A)	□ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A)
☐ Drift De☐ Algal Ma☐ Iron De☐ Surface☐ Inundati☐ Sparse☐ Surface Wa Water Table Saturation F (includes ca	posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca rvations: ter Present? e Present? pipillary fringe)	Yes Yes Yes Yes Yes	Aquat Hydro Oxidiz Prese Recer Stunte (B7) Other (B8) No Depth (in No Depth (in	gen Sulfide Odor (C1) ed Rhizospheres along nce of Reduced Iron (C4 at Iron Reduction in Tilled ed or Stressed Plants (Di (Explain in Remarks) aches): cches):	d Soils (C6) 1) (LRR A) Wetland F	□ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
☐ Drift De☐ Algal Ma☐ Iron De☐ Surface☐ Inundati☐ Sparse☐ Surface Wa Water Table Saturation F (includes ca	posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca rvations: ter Present? e Present? pipillary fringe)	Yes Yes Yes Yes Yes	Aquat Hydro Oxidiz Prese Recer Stunte (B7) Other (B8) No Depth (in No Depth (in	gen Sulfide Odor (C1) ed Rhizospheres along nce of Reduced Iron (C4 at Iron Reduction in Tilled d or Stressed Plants (Di (Explain in Remarks)	d Soils (C6) 1) (LRR A) Wetland F	□ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Drift De	posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca rvations: ter Present? e Present? Present? apillary fringe) ecorded Data (strea	Yes	☐ Aquati ☐ Hydro ☐ Oxidiz ☐ Prese ☐ Recer ☐ Stunte (B8) No ☐ Depth (in No ☐ Depth (in monitoring well, ac	gen Sulfide Odor (C1) ed Rhizospheres along nce of Reduced Iron (C4 at Iron Reduction in Tilled ed or Stressed Plants (D) (Explain in Remarks) aches): ches): erial photos, previous ins	d Soils (C6) 1) (LRR A) Wetland F	□ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Drift De	posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca rvations: ter Present? e Present? pipillary fringe)	Yes	☐ Aquati ☐ Hydro ☐ Oxidiz ☐ Prese ☐ Recer ☐ Stunte (B8) No ☐ Depth (in No ☐ Depth (in monitoring well, ac	gen Sulfide Odor (C1) ed Rhizospheres along nce of Reduced Iron (C4 at Iron Reduction in Tilled ed or Stressed Plants (De (Explain in Remarks) aches): aches): erial photos, previous ins	d Soils (C6) 1) (LRR A) Wetland F	□ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Drift De	posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca rvations: ter Present? e Present? Present? apillary fringe) ecorded Data (strea	Yes	☐ Aquati ☐ Hydro ☐ Oxidiz ☐ Prese ☐ Recer ☐ Stunte (B8) No ☐ Depth (in No ☐ Depth (in monitoring well, ac	gen Sulfide Odor (C1) ed Rhizospheres along nce of Reduced Iron (C4 at Iron Reduction in Tilled ed or Stressed Plants (De (Explain in Remarks) aches): aches): erial photos, previous ins	d Soils (C6) 1) (LRR A) Wetland F	□ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
☐ Drift De☐ Algal Ma☐ Iron De☐ Surface☐ Inundati☐ Sparsel☐ Field Obse Surface Wa Water Table Saturation F (includes carbe Reference Describe Describ	posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca rvations: ter Present? e Present? Present? apillary fringe) ecorded Data (strea	Yes	☐ Aquati ☐ Hydro ☐ Oxidiz ☐ Prese ☐ Recer ☐ Stunte (B8) No ☐ Depth (in No ☐ Depth (in monitoring well, ac	gen Sulfide Odor (C1) ed Rhizospheres along nce of Reduced Iron (C4 at Iron Reduction in Tilled ed or Stressed Plants (De (Explain in Remarks) aches): aches): erial photos, previous ins	d Soils (C6) 1) (LRR A) Wetland F	□ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)

Project/Site: Bond Road/SR 305		City/Cour	nty: <u>Poulsbo,</u>	Kitsap	Sampling Date:6-17	7-16
Applicant/Owner: Edward Rose and Sons				State: WA	Sampling Point: <u>TH</u>	1-C
Investigator(s): <u>J. Bartlett</u>			_ Section, To	ownship, Range: <u>S 10 & 1</u>	1, T 26 N, R 1E.	
Landform (hillslope, terrace, etc.): hillslope						
Subregion (LRR): MLRA 2					-	
Soil Map Unit Name: 41 Poulsbo gravelly sandy loam, 15-30						
Are climatic / hydrologic conditions on the site typical for this						
Are Vegetation, Soil, or Hydrology sign	-			ormal Circumstances" pre		_
Are Vegetation, Soil, or Hydrology natu				ed, explain any answers i		_
SUMMARY OF FINDINGS – Attach site map						ıres, etc.
			<u> </u>	<u>, </u>	<u> </u>	•
Hydrophytic Vegetation Present? Yes ⊠ No ☐		ls t	the Sampled	l Area		
Hydric Soil Present? Yes ⊠ No ☐ Wetland Hydrology Present? Yes ⊠ No ☐		wit	thin a Wetlar	nd? Yes⊠ N	10 🗆	
Remarks: Middle of Wetland C, which is a small sloping, s	crub/shrub s	system. S	Slopes down t	to grass lined swale along	Bond Road (SR 307). the
boundary of Wetland C was redelineated in June 2016, wh					•	,
VEGETATION – Use scientific names of plan	ts.					
	Absolute	Dominar	nt Indicator	Dominance Test work	sheet:	
Tree Stratum (Plot size: 30 feet) 1			S? Status	Number of Dominant Sp That Are OBL, FACW, of		(A)
2				Total Number of Domin		
3				Species Across All Stra	ta: <u>1</u>	(B)
4				Percent of Dominant Sp		(A /D)
Sapling/Shrub Stratum (Plot size: 30' diameter)		- Total	OOVCI	That Are OBL, FACW, o	or FAC: 100%	(A/B)
Rubus spectabilis	90%	Yes	FAC	Prevalence Index wor	ksheet:	
2. Rubus armeniacus	5%	No	FAC	Total % Cover of:	Multiply by	<u>/:</u>
3		-		OBL species		
4				FACW species		
5				FAC species		
Herb Stratum (Plot size: 30 feet)	95%	= Total	Cover	FACU species		
1				UPL species Column Totals:	x 5 =	(B)
2.				Column Totals.	(A)	(D)
3				Prevalence Index	= B/A =	_
4				Hydrophytic Vegetation	on Indicators:	
5				□ Dominance Test is:	>50%	
6		-		☐ Prevalence Index is		
7					otations ¹ (Provide sup s or on a separate she	
8				☐ Wetland Non-Vascu	ılar Plants ¹	
9 10				☐ Problematic Hydrop	hytic Vegetation ¹ (Ex	plain)
11.				¹ Indicators of hydric soi		gy must
	50%		Cover	be present, unless distu	irbed or problematic.	
Woody Vine Stratum (Plot size:)	0070	- rotar	Cover			
1		-		Hydrophytic		
2				Vegetation Present? Yes	s⊠ No∏	
% Bare Ground in Herb Stratum 50		= Total	Cover			
Remarks: The hydrophytic vegetation criterion is met beca	use there is	greater t	han 50% don	inance by FAC species	The wetland vegetati	ion
community remains as it was delineated in 2011.				, , ,	3	

	cription: (Describe	e to the d	epth ne			or or confirm	n the al	sence	e of indicators.)
Depth (inches)	Matrix Color (moist)	%	Colo	Redox r (moist)	x Features	1 Loc ²	Toytu	ro	Remarks
			· · · · · ·	ii (IIIOISI)				10	Remains
<u>0-16"</u>	10YR 2/1	100%			· 		sa lo		
		_			· 				-
	-				· 				
					·				
							-		
, ,	oncentration, D=De					ated Sand G			cation: PL=Pore Lining, M=Matrix.
_	Indicators: (Appli	cable to	all LRR	s, unless other	wise noted.)		lı	ndicate	ors for Problematic Hydric Soils ³ :
Histosol	` '			Sandy Redox (S					n Muck (A10)
	ipedon (A2)			Stripped Matrix ('		L		Parent Material (TF2)
☐ Black His	` '				ineral (F1) (exc	ept MLRA 1)	L	_ Oth	er (Explain in Remarks)
	n Sulfide (A4) I Below Dark Surfac	ο (Λ11)		Loamy Gleyed N	` '				
·	irk Surface (A12)	æ (ATT)		Depleted Matrix Redox Dark Surf			3	Indicat	ors of hydrophytic vegetation and
	lucky Mineral (S1)			Depleted Dark S	, ,				and hydrology must be present,
	leyed Matrix (S4)			Redox Depressi	, ,				ss disturbed or problematic.
	Layer (if present):				(, ,				
	, , ,								
, , <u> </u>	ches):						Hyd	ric Soi	I Present? Yes ⊠ No □
• `	e hydric soil criterio		— hecause	the soil profile	exhibits charact	eristics of hyd			
Tromano. 11	io riyano oon ontone	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	oodaaa	o the con prome	oxinoito oriaraot	onouoo oi ny		maioat	0171121
HYDROLO	GY								
Wetland Hy	drology Indicators	:							
Primary India	cators (minimum of	one requ	ired; che	eck all that apply	/)			Seco	ndary Indicators (2 or more required)
☐ Surface	Water (A1)			☐ Water-Stair	ned Leaves (B9)	(except MLF	RA	□ V	Vater-Stained Leaves (B9) (MLRA 1, 2,
	ter Table (A2)			1, 2, 4A	, and 4B)				4A, and 4B)
⊠ Saturation	on (A3)			☐ Salt Crust (B11)				Prainage Patterns (B10)
☐ Water Ma	arks (B1)			☐ Aquatic Inv	ertebrates (B13)				Pry-Season Water Table (C2)
☐ Sedimen	t Deposits (B2)			☐ Hydrogen S	Sulfide Odor (C1)		□s	saturation Visible on Aerial Imagery (C9)
☐ Drift Dep	osits (B3)			☐ Oxidized R	hizospheres alo	ng Living Roc	ts (C3)	□G	Geomorphic Position (D2)
☐ Algal Ma	t or Crust (B4)			☐ Presence o	f Reduced Iron	(C4)		□s	hallow Aquitard (D3)
☐ Iron Dep	osits (B5)			☐ Recent Iron	Reduction in Ti	lled Soils (C6	6)	□F	AC-Neutral Test (D5)
☐ Surface	Soil Cracks (B6)			☐ Stunted or	Stressed Plants	(D1) (LRR A)	□R	aised Ant Mounds (D6) (LRR A)
☐ Inundation	on Visible on Aerial	Imagery	(B7)	☐ Other (Expl	ain in Remarks)			□F	rost-Heave Hummocks (D7)
☐ Sparsely	Vegetated Concav	e Surface	e (B8)						
Field Obser	vations:								
Surface Wat	er Present?	Yes 🗌	No 🛛	Depth (inches):				
Water Table	Present?	Yes 🛛	No 🗌	Depth (inches): <u>10"</u>				
Saturation P	resent?	Yes ⊠	No 🗌	Depth (inches): surface	Wetl	and Hy	drolog	y Present? Yes ⊠ No □
(includes car	oillary fringe)				<u> </u>				
Describe Re	corded Data (strear	n gauge,	monitor	ıng well, aerial p	notos, previous	inspections),	it availa	able:	
		soil satu	ation to	the surface of t	he soil profile. 1	he wetland w	vas satu	rated v	with water during the 2016 wetland
ueimeation v	erification site visit.								

Project/Site: Bond Road/SR 305	(City/County	y: <u>Poulsbo,</u>	Sampling Date: 2-2011 6-20)16	
Applicant/Owner: Edward Rose and Sons				State: WA	Sampling Point: TH 2-C	
Investigator(s): <u>J. Bartlett</u>						
Landform (hillslope, terrace, etc.): hillslope		Local relie	ef (concave,	, convex, none): undulating	Slope (%): <u>5%</u>	
Subregion (LRR): MLRA 2						
Soil Map Unit Name: 41 Poulsbo gravelly sandy loam, 15-30						
Are climatic / hydrologic conditions on the site typical for this						
Are Vegetation, Soil, or Hydrology sign	-			ormal Circumstances" pres	ent? Yes⊠ No⊡	
Are Vegetation, Soil, or Hydrology natu				ed, explain any answers in		
SUMMARY OF FINDINGS – Attach site map	snowing	sampiin	g point i	ocations, transects,	important features, e	tc.
Hydrophytic Vegetation Present? Yes ⊠ No □		le th	e Sampled	ΙΛιοο		
Hydric Soil Present? Yes ☐ No ☒			-	nd? Yes ☐ No	ı ⊠	
Wetland Hydrology Present? Yes ☐ No ☒					_	
Remarks: Upland area south of Wetland C. Area is disturt during the 6-17-2016 field verification, it appeared to rema					this area was examined	
during the 6 17 2010 field verification, it appeared to fema	iii as it iiaa t	during the .	2010 deline	ation.		
VEGETATION Has a simulation of allowed	4 -					
VEGETATION – Use scientific names of plan		<u> </u>				
Tree Stratum (Plot size: 30 feet)	Absolute <u>% Cover</u>			Dominance Test works		
1. Alnus rubra				Number of Dominant Spe That Are OBL, FACW, or	FAC: <u>3</u> (A)	
2				Total Number of Domina	nt	
3				Species Across All Strata		
4				Percent of Dominant Spe	ories	
Cooling/Chruh Stratum (Plot cizo: 20' diameter)	5%	= Total C	over		FAC: <u>100</u> (A/B	3)
Sapling/Shrub Stratum (Plot size: 30' diameter) 1. Rubus armeniacus	80%	Vas	FΔC	Prevalence Index works	sheet:	
Oemleria cerasiformis					Multiply by:	
3				OBL species		
4.				FACW species		
5				FAC species	x 3 =	
		= Total C			x 4 =	
Herb Stratum (Plot size: 30 feet)	4.00/	Vaa	EA C) A /	UPL species		
Phalaris arundinacea	10%			Column Totals:	(A) (B	3)
2 3				Prevalence Index :	= B/A =	
4				Hydrophytic Vegetation		
5.				□ Dominance Test is > 1	50%	
6.				☐ Prevalence Index is	3.0 ¹	
7					ations ¹ (Provide supporting	
8				□ Wetland Non-Vascul	or on a separate sheet)	
9					ytic Vegetation ¹ (Explain)	
10				_ , ,	and wetland hydrology must	t
11				be present, unless distur		
Woody Vine Stratum (Plot size:)	10%	= Total C	over			
1				Hydrophytic		
2.				Vegetation		
		= Total C		Present? Yes	⊠ No □	
% Bare Ground in Herb Stratum 90			00/ 1 :	FAC 1=: 2:::		
Remarks: Hydrophytic vegetation criterion is met because	tnere is grea	ater than 5	u% domina	nce by FAC and FACW spe	CIES.	

Depth	cription: (Descrit Matrix		eptn n	eeded to document the Redox Feature		onfirm	the absence of indicators.)
(inches)	Color (moist)	%	Cole		Type ¹ Lo	oc ²	Texture Remarks
0-16"	10YR 3/3	100%				:	sa lo
			_				
				·		 -	
	•						
						 -	
							
			- —				
				duced Matrix, CS=Covere		and Gra	
-		licable to		ts, unless otherwise not	ted.)		Indicators for Problematic Hydric Soils ³ :
Histosol	` '			Sandy Redox (S5)			2 cm Muck (A10)
	oipedon (A2)			Stripped Matrix (S6)	4) / 1 841 1	D 4 4)	Red Parent Material (TF2)
	istic (A3)			Loamy Mucky Mineral (F		RA 1)	☐ Other (Explain in Remarks)
	en Sulfide (A4) d Below Dark Surfa	200 (411)		Loamy Gleyed Matrix (F2 Depleted Matrix (F3)	2)		
	ark Surface (A12)	ace (ATT)		Redox Dark Surface (F6)			³ Indicators of hydrophytic vegetation and
	Mucky Mineral (S1)			Depleted Dark Surface (F			wetland hydrology must be present,
	Bleyed Matrix (S4)		_	Redox Depressions (F8)	.,		unless disturbed or problematic.
•	Layer (if present)	:		· · · · · · · · · · · · · · · · · · ·			
	nches):						Hydric Soil Present? Yes ☐ No ☒
	,			any of the hydric soil indic	notoro		
rtomants. Ti	niis proniic nas no c	naractorist	103 101 1	arry or the riyane son male	ators.		
HYDROLO	GY						
Wetland Hy	drology Indicator	s:					
Primary Indi	cators (minimum o	f one requi	red; ch	eck all that apply)			Secondary Indicators (2 or more required)
☐ Surface	Water (A1)			☐ Water-Stained Leav	es (B9) (excep	t MLR	Water-Stained Leaves (B9) (MLRA 1, 2,
☐ High Wa	ater Table (A2)			1, 2, 4A, and 4B	3)		4A, and 4B)
☐ Saturation	on (A3)			☐ Salt Crust (B11)			☐ Drainage Patterns (B10)
☐ Water M	larks (B1)			☐ Aquatic Invertebrate	es (B13)		□ Dry-Season Water Table (C2)
☐ Sedimer	nt Deposits (B2)			☐ Hydrogen Sulfide O	dor (C1)		☐ Saturation Visible on Aerial Imagery (C9)
☐ Drift Dep	posits (B3)			☐ Oxidized Rhizosphe	res along Livin	g Roots	s (C3) Geomorphic Position (D2)
☐ Algal Ma	at or Crust (B4)			☐ Presence of Reduce	ed Iron (C4)		☐ Shallow Aquitard (D3)
☐ Iron Dep	oosits (B5)			☐ Recent Iron Reducti	on in Tilled Soi	ils (C6)	☐ FAC-Neutral Test (D5)
☐ Surface	Soil Cracks (B6)			☐ Stunted or Stressed	Plants (D1) (L	RR A)	Raised Ant Mounds (D6) (LRR A)
☐ Inundati	on Visible on Aeria	l Imagery ((B7)	☐ Other (Explain in Re	emarks)		☐ Frost-Heave Hummocks (D7)
☐ Sparsely	y Vegetated Conca	ve Surface	(B8)				
Field Obser	rvations:						
Surface Wa	ter Present?	Yes □	No 🖂	Depth (inches):			
Water Table	Present?		No 🏻	Depth (inches):			
Saturation F			No 🖾	Depth (inches):		Wetla	nd Hydrology Present? Yes ☐ No ⊠
	pillary fringe)	162 🖂	NO 🖂	Deptif (inches).		VVCIIA	ind Trydrology Tresent: Tes No
		am gauge,	monito	ring well, aerial photos, p	revious inspect	tions), if	available:
Remarks: N	o hydrology preser	nt and no e	videnc	e of wetland hydrology.			

Project/Site: Bond Road/SR 305		City/County	y: <u>Poulsbo,</u>	Sampling Date: 2/2011	6-2016	
Applicant/Owner: Edward Rose and Sons				State: WA	Sampling Point: TH 14	
Investigator(s): <u>J. Bartlett</u>			Section, To	ownship, Range: <u>S 10 & 11</u>	, T 26 N, R 1E.	
Landform (hillslope, terrace, etc.): hillslope		Local relie	ef (concave,	, convex, none): undulating	Slope (%)): <u>5%</u>
Subregion (LRR): MLRA 2						
Soil Map Unit Name: 41 Poulsbo gravelly sandy loam, 15-30						
Are climatic / hydrologic conditions on the site typical for this						
Are Vegetation, Soil, or Hydrology sign				ormal Circumstances" prese	ent? Yes⊠ No□	
Are Vegetation, Soil, or Hydrology natu				ed, explain any answers in		
SUMMARY OF FINDINGS – Attach site map					,	s, etc.
Hydrophytic Vegetation Present? Yes ☐ No ☒		lo th	a Campled	Aron		
Hydric Soil Present? Yes ☐ No ☒			ie Sampled in a Wetlar		. ⊠	
Wetland Hydrology Present? Yes ☐ No ☒					, A	
Remarks: Upland area east of Wetland A. Young forest with	ith trees just	t over 20 fe	et, shrubs a	and herbaceous cover).		
VEGETATION – Use scientific names of plant				_		
Tree Stratum (Plot size: 30 feet)	Absolute % Cover			Dominance Test works		
1. Alnus rubra		Yes		Number of Dominant Spe That Are OBL, FACW, or		(A)
Pseudotsuga menziesii						()
3				Total Number of Dominal Species Across All Strata		(B)
4				Percent of Dominant Spe	ocios	
Sapling/Shrub Stratum (Plot size: 30' diameter)	15%	= Total C	over	That Are OBL, FACW, or		(A/B)
1. Rubus spectabilis	80%	Yes	FAC	Prevalence Index works		
2. Rubus armeniacus	10%	No	FAC	Total % Cover of:		
3. <u>llex opaca</u>				OBL species		
4				FAC species		
5		= Total C		FAC species		
Herb Stratum (Plot size: 30 feet)	90 /6	= Total C	ovei	UPL species		
1. Polystichum munitum	10%	Yes	FACU	Column Totals:		
2. Rubus ursinus	5%	Yes	<u>FACU</u>			_ ` ,
3					= B/A =	
4				Hydrophytic Vegetation ☐ Dominance Test is >		
5				☐ Prevalence Index is		
6				☐ Morphological Adapta		rtina
7 8					or on a separate sheet	
9				☐ Wetland Non-Vascula		
10.				☐ Problematic Hydroph	, , , , ,	,
11.				¹ Indicators of hydric soil a be present, unless distur		must
		= Total C		be present, unless distant		
Woody Vine Stratum (Plot size:)						
1				Hydrophytic Vegetation		
2		Total C			□ No ⊠	
% Bare Ground in Herb Stratum 85		= Total C	over			
Remarks: The hydrophytic vegetation criterion is not met b	ecause the	re is less th	an 50% doi	minance by FAC.		

Depth	cription: (Describ Matrix	e to the d	eptn n	Redox Features		onfirm 1	the absence of indicators.)
(inches)	Color (moist)	%	Cole		Type ¹ Loc	c ²	Texture Remarks
0-16"	10YR 3/3	100%				(gr sa lo
				<u>-</u>			
	_						
							· · · · · · · · · · · · · · · · · · ·
				<u> </u>			
		•		duced Matrix, CS=Covered		nd Gra	
-		icable to a		Rs, unless otherwise note	ed.)		Indicators for Problematic Hydric Soils ³ :
Histosol	, ,			Sandy Redox (S5)			2 cm Muck (A10)
	pipedon (A2)			Stripped Matrix (S6)	\		Red Parent Material (TF2)
	istic (A3)			Loamy Mucky Mineral (F1		(A 1)	☐ Other (Explain in Remarks)
	en Sulfide (A4) d Below Dark Surfa	00 (411)		Loamy Gleyed Matrix (F2) Depleted Matrix (F3)			
•	ark Surface (A12)	ce (ATT)		Redox Dark Surface (F6)			³ Indicators of hydrophytic vegetation and
	Mucky Mineral (S1)			Depleted Dark Surface (F)	7)		wetland hydrology must be present,
	Gleyed Matrix (S4)			Redox Depressions (F8)	• /		unless disturbed or problematic.
•	Layer (if present):			······································			
	, , ,						
,, <u> </u>	nches):						Hydric Soil Present? Yes ☐ No ☒
	,			ause of the high chroma o	f the eail profil	_	,u
itemarks. II	ne nyanc son chten	011 13 1101 11	iet bec	ause of the high chilotha o	i tile son prom	С.	
HYDROLO)GY						
-	drology Indicator						
Primary Indi	cators (minimum of	one requi	red; ch	eck all that apply)			Secondary Indicators (2 or more required)
☐ Surface	Water (A1)			☐ Water-Stained Leave	es (B9) (except	t MLRA	Water-Stained Leaves (B9) (MLRA 1, 2,
☐ High Wa	ater Table (A2)			1, 2, 4A, and 4B)			4A, and 4B)
☐ Saturation	on (A3)			☐ Salt Crust (B11)			□ Drainage Patterns (B10)
☐ Water M	larks (B1)			☐ Aquatic Invertebrates	s (B13)		□ Dry-Season Water Table (C2)
☐ Sedimer	nt Deposits (B2)			☐ Hydrogen Sulfide Od	or (C1)		☐ Saturation Visible on Aerial Imagery (C9)
☐ Drift Dep	posits (B3)			☐ Oxidized Rhizospher	es along Living	g Roots	(C3) Geomorphic Position (D2)
☐ Algal Ma	at or Crust (B4)			☐ Presence of Reduced	d Iron (C4)		☐ Shallow Aquitard (D3)
☐ Iron Dep	oosits (B5)			☐ Recent Iron Reduction	n in Tilled Soil	ls (C6)	☐ FAC-Neutral Test (D5)
☐ Surface	Soil Cracks (B6)			☐ Stunted or Stressed I	Plants (D1) (LF	RR A)	☐ Raised Ant Mounds (D6) (LRR A)
☐ Inundati	on Visible on Aerial	Imagery (B7)	☐ Other (Explain in Rer	marks)		☐ Frost-Heave Hummocks (D7)
☐ Sparsely	y Vegetated Conca	ve Surface	(B8)				
Field Obser	rvations:						
Surface Wa	ter Present?	Yes 🗌	No 🖂	Depth (inches):			
Water Table			No 🖾	Depth (inches):			
Saturation F						Wotlar	nd Hydrology Present? Yes ☐ No ⊠
	pillary fringe)	162 🖂	No 🛚	Depth (inches):		VVCIIAI	ild Hydrology Fresent: Fes 🗀 No 🖂
		m gauge,	monito	ring well, aerial photos, pre	evious inspecti	ions), if	available:
Remarks: N	o hydrology or evid	ence of we	etland I	nydrology observed in this	area.		

Project/Site: Bond Road/SR 305	: Poulsbo,	Kitsap	Sampling Date: 2/2011 6-2016			
Applicant/Owner: Edward Rose and Sons				State: WA	Sampling Point: TH 15	
Investigator(s): J. Bartlett			Section, To	ownship, Range: <u>S 10 & 11</u>	, T 26 N, R 1E.	
Landform (hillslope, terrace, etc.): hillslope		Local relie	ef (concave,	convex, none): undulating	Slop	e (%): <u>5%</u>
Subregion (LRR): MLRA 2	Lat:			Long:	Datum	ı:
Soil Map Unit Name: 41 Poulsbo gravelly sandy loam, 15-30						
Are climatic / hydrologic conditions on the site typical for this						
Are Vegetation, Soil, or Hydrology sign	-			ormal Circumstances" prese	ent? Yes⊠ No	л П
Are Vegetation, Soil, or Hydrology natur				ed, explain any answers in	_	~
SUMMARY OF FINDINGS – Attach site map s						tures, etc.
Hydrophytic Vegetation Present? Yes ⊠ No ☐ Hydric Soil Present? Yes ☐ No ☒		Is th	e Sampled	Area		
Hydric Soil Present? Yes ☐ No ☑ Wetland Hydrology Present? Yes ☐ No ☑		with	in a Wetlar	nd? Yes ☐ No	, ×	
Remarks: Upland area east of Wetland A. Young forest wi	th trees just	over 20 fe	et, shrubs a	and herbaceous cover).		
	,		,	,		
VEGETATION – Use scientific names of plant	s.					
	Absolute	Dominant	Indicator	Dominance Test works	heet:	
Tree Stratum (Plot size: 30 feet)	% Cover	•		Number of Dominant Spe		
1. Alnus rubra			· ·	That Are OBL, FACW, or	FAC: <u>3</u>	(A)
2. Pseudotsuga menziesii				Total Number of Domina		(D)
3				Species Across All Strata	a: <u>6</u>	(B)
7.		= Total C		Percent of Dominant Spe		(A /D)
Sapling/Shrub Stratum (Plot size: 30' diameter)	10 / 0	- 10tai 0	0,001	That Are OBL, FACW, or	FAC: 50%	(A/B)
Rubus spectabilis	30%	Yes	FAC	Prevalence Index works	sheet:	
2. Rubus armeniacus	20%	Yes	FAC	Total % Cover of:		
3				OBL species		
4				FACW species		
5				FACIL appeirs		
Herb Stratum (Plot size: 30 feet)	50%	= Total C	over	FACU species		
1. Phalaris arundinacea	80%	Yes	FACW	Column Totals:		(B)
2. Rubus ursinus	40%	Yes	FACU	Coldini Fotale.		(5)
3				Prevalence Index =		
4				Hydrophytic Vegetation		
5	-			☐ Dominance Test is >		
6				☐ Prevalence Index is		
7				☐ Morphological Adapta data in Remarks		
8				☐ Wetland Non-Vascula		,
9				☐ Problematic Hydroph	ytic Vegetation ¹ (I	Explain)
10				¹ Indicators of hydric soil a		
11		= Total C		be present, unless distur	bed or problemation	C.
Woody Vine Stratum (Plot size:)	12070	- 10tai 0	0,001			
1				Hydrophytic		
2				Vegetation Present? Yes	□ No ⊠	
9/ Para Ground in Horb Stratum		= Total C	over			
% Bare Ground in Herb Stratum Remarks: The hydrophytic vegetation criterion is not met b	ecause ther	e is less th	an 50% dor	minance by FAC		
The state of the s		c .ccc tri	55 /6 401			

Depth (inches)	Color (moist)	%	Colc	or (moist) % Type ¹ Lo	cc ² Text	ure	Remarks
)-12"	10YR 3/2	100%					No redox features
						_	
12-16"	10YR 4/4	100%			<u>gr sa</u>	10	
			- —				
							-
							
			- —				
				duced Matrix, CS=Covered or Coated S			ocation: PL=Pore Lining, M=Matrix.
lydric Soil I	Indicators: (Appl	icable to	all LRR	s, unless otherwise noted.)		Indicat	ors for Problematic Hydric Soils ³ :
Histosol				Sandy Redox (S5)			m Muck (A10)
•	pipedon (A2)			Stripped Matrix (S6)			d Parent Material (TF2)
Black His	` '			Loamy Mucky Mineral (F1) (except ML	RA 1)	☐ Oth	er (Explain in Remarks)
	n Sulfide (A4) I Below Dark Surfa	co (A11)		Loamy Gleyed Matrix (F2) Depleted Matrix (F3)			
	irk Surface (A12)	Ce (ATT)		Redox Dark Surface (F6)		³ Indicat	ors of hydrophytic vegetation and
	lucky Mineral (S1)			Depleted Dark Surface (F7)			and hydrology must be present,
	leyed Matrix (S4)			Redox Depressions (F8)			ss disturbed or problematic.
	Layer (if present):			. ,			•
Type:							
					Llva	C.:	I Present? Yes □ No ⊠
Depth (ind	ches):				пус	aric Soi	i Fresent: Tes 🔲 NO 🖂
• `			met bec	ause of the high chroma of the soil prof		aric Soi	Tresent: Tes No
Remarks: Th	ne hydric soil criteri		met bec	ause of the high chroma of the soil prof		aric Soi	Tresent: Tes No
Remarks: Th	ne hydric soil criteri	on is not r	met bec	ause of the high chroma of the soil prof		aric Soi	Triesent: Tes NU
YDROLO Wetland Hyd	ne hydric soil criteri	on is not r					andary Indicators (2 or more required)
YDROLO Wetland Hyderimary Indica	GY drology Indicators	on is not r		eck all that apply)	ile.	Seco	ondary Indicators (2 or more required)
YDROLO Wetland Hyderimary Indic	GY drology Indicators	on is not r		eck all that apply) Water-Stained Leaves (B9) (exceptions)	ile.	Seco	ondary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2
YDROLO Vetland Hyd Surface \ High War	GY drology Indicators cators (minimum of Water (A1) ter Table (A2)	on is not r		eck all that apply) Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B)	ile.	Secc	ondary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
YDROLO Vetland Hyd Surface \ High War Saturatio	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3)	on is not r		eck all that apply) Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) Salt Crust (B11)	ile.	Secc	ondary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10)
YDROLO YDROLO Vetland Hyd Surface N High War Saturatio Water Ma	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3)	on is not r		eck all that apply) Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B)	ile.	Seco	ondary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
YDROLO Wetland Hyo Primary Indic Surface \ High War Saturatio Water Ma Sedimen	GY drology Indicators eators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1)	on is not r		eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	ot MLRA	Second V	ondary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C5
YDROLO Wetland Hyd Surface \ High Wat Saturatio Water Ma Sedimen Drift Dep	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2)	on is not r		eck all that apply) Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13)	ot MLRA	Secc	ondary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2)
YDROLO Vetland Hyd Surface V High War Saturatio Water Ma Sedimen Drift Dep Algal Ma	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) t or Crust (B4)	on is not r		eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir	ot MLRA	Secc V V C C C C C C C C C C C C C C C C C	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C3 Geomorphic Position (D2) Shallow Aquitard (D3)
YDROLO Wetland Hyd Surface \ High Wat Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Dep	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) t or Crust (B4)	on is not r		eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4)	ot MLRA og Roots (C3	Seccion V	ondary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (Cs
YDROLO Wetland Hyd Surface \ High Wat Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Dep	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) oosits (B3) t or Crust (B4) oosits (B5)	s:	iired; chi	eck all that apply) Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	ot MLRA og Roots (C3	Second V	ondary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C5 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
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YDROLO Wetland Hyd Surface N High War Saturation Water Ma Sedimen Drift Dep Algal Ma Iron Dep Surface S Inundation	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial	s: fone requ	ired; che	eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L	ot MLRA og Roots (C3	Second V	ondary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C5 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
YDROLO Wetland Hyd Surface N High Wat Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Dep Surface S Inundatio Sparsely	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial vegetated Concavations:	s: Sone required in some second in s	(B7) e (B8)	eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L	ot MLRA og Roots (C3	Second V	ondary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C5 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
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YDROLO Wetland Hyd Primary Indic Surface N High War Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Dep Surface S Inundatic Sparsely Field Observ Surface Water	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial vegetated Concav vations: er Present?	Imagery ve Surface	(B7) e (B8) No ⊠ No ⊠	eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L	ot MLRA ag Roots (C3 ils (C6) .RR A)	Seccion V	ondary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (Cs Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
YDROLO Wetland Hyde Primary Indic Surface N High Wat Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depo Surface S Inundatio Sparsely Field Observ Surface Water Water Table Saturation Princludes cap	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial vegetated Concav vations: er Present? Present? resent? pillary fringe)	Imagery ve Surface Yes Yes Yes Yes Yes Yes Yes Yes	(B7) e (B8) No ⊠ No ⊠	eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L	ot MLRA og Roots (C3 ils (C6) .RR A) Wetland H	Second V	ondary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C5 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
YDROLO Wetland Hyde Primary Indic Surface N High Wat Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depo Surface S Inundatio Sparsely Field Observ Surface Water Water Table Saturation Princludes cap	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial vegetated Concav vations: er Present? Present? resent? pillary fringe)	Imagery ve Surface Yes Yes Yes Yes Yes Yes Yes Yes	(B7) e (B8) No ⊠ No ⊠	eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L	ot MLRA og Roots (C3 ils (C6) .RR A) Wetland H	Second V	ondary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (Caseomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
YDROLO Wetland Hyde Primary Indic Surface N High Wat Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depo Surface S Inundatio Sparsely Field Observ Surface Water Water Table Saturation Princludes cap	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial vegetated Concav vations: er Present? Present? resent? pillary fringe)	Imagery ve Surface Yes Yes Yes Yes Yes Yes Yes Yes	(B7) e (B8) No ⊠ No ⊠	eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L	ot MLRA og Roots (C3 ils (C6) .RR A) Wetland H	Second V	ondary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (Caseomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
YDROLO Wetland Hyd Primary Indic Surface \ High War Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Dep Surface S Inundatic Sparsely Field Observ Surface Water Water Table Saturation Princludes cap Describe Rec	GY drology Indicators eators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial vegetated Concav vations: er Present? Present? poillary fringe) corded Data (strea	Imagery ve Surface Yes Yes Yes Yes Yes Managery	(B7) e (B8) No No No no monitor	eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L	ot MLRA og Roots (C3 ils (C6) .RR A) Wetland H tions), if avai	Second V	ondary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (Caseomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
YDROLO Vetland Hyd Primary Indic Surface \ High War Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Dep Surface S Inundatio Sparsely Field Observ Surface Water Vater Table Saturation Princludes cap Describe Rec	GY drology Indicators eators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial vegetated Concav vations: er Present? Present? poillary fringe) corded Data (strea	Imagery ve Surface Yes Yes Yes Yes Yes Managery	(B7) e (B8) No No No no monitor	eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): Depth (inches):	ot MLRA og Roots (C3 ils (C6) .RR A) Wetland H tions), if avai	Second V	ondary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (Comorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

Project/Site: Bond Road/SR 305		City/County	: Poulsbo,	Kitsap	Sampling Date: 2/2011 6-2016	
Applicant/Owner: Edward Rose and Sons				State: WA	Sampling Point: TH 16	
Investigator(s): J. Bartlett						
Landform (hillslope, terrace, etc.): hillslope		Local relie	ef (concave,	, convex, none): undulating	Slope (%):	5%
Subregion (LRR): MLRA 2						
Soil Map Unit Name: 41 Poulsbo gravelly sandy loam, 15-30						
Are climatic / hydrologic conditions on the site typical for this						
Are Vegetation, Soil, or Hydrology sign					ent? Yes⊠ No□	
Are Vegetation, Soil, or Hydrology natu				ed, explain any answers in		
SUMMARY OF FINDINGS – Attach site map						s, etc.
Hydrophytic Vegetation Present? Yes ⊠ No □						
Hydric Soil Present? Yes ☐ No ☒			e Sampled		. 57	
Wetland Hydrology Present? Yes ☐ No ☒		with	in a Wetlar	nd? Yes ☐ No	, M	
Remarks: Upland area west of Wetland C. Young forest w	rith trees jus	t over 20 fe	et, shrubs	and herbaceous cover).		
VEGETATION – Use scientific names of plant	ts.					
Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species?		Dominance Test works		
1. Alnus rubra		•		Number of Dominant Spe That Are OBL, FACW, or		(A)
2						(, ,
3.				Total Number of Dominal Species Across All Strata		(B)
4				,		()
Sapling/Shrub Stratum (Plot size: 30' diameter)	5%	= Total C	over	Percent of Dominant Spe That Are OBL, FACW, or		(A/B)
1. Rubus spectabilis	60%	Yes	FAC	Prevalence Index works	sheet:	
2. Rubus armeniacus	10%	No	FAC	Total % Cover of:	Multiply by:	_
3				OBL species		
4				FACW species		
5				FACULARISIS		
Herb Stratum (Plot size: 30 feet)	70%	= Total C	over	FACU species		
1. Phalaris arundinacea	60%	Yes	FACW	Column Totals:		
2. Polystichum munitum	20%	Yes	<u>FACU</u>			_ (5)
3. Rubus ursinus	15%	No	FACU		= B/A =	
4				Hydrophytic Vegetation		
5				☐ Dominance Test is >		
6				☐ Prevalence Index is☐ Morphological Adapta		ina
7					or on a separate sheet)	
8				☐ Wetland Non-Vascula	ar Plants ¹	
9 10				☐ Problematic Hydroph	ytic Vegetation ¹ (Explain	n)
11.				¹ Indicators of hydric soil a		nust
		= Total C		be present, unless distur	bed or problematic.	
Woody Vine Stratum (Plot size:)						
1		-		Hydrophytic		
2				Vegetation Present? Yes	⊠ No □	
% Bare Ground in Herb Stratum 5		= Total C	over			
Remarks: The hydrophytic vegetation criterion is met beca	use there is	greater tha	an 50% don	│ ninance by FAC and FACW	/ species.	
, , , , , , , , , , , , , , , , , , ,	- 1-	<u> </u>			•	

Depth	Matrix	%	<u> </u>		x Feature		Loc ²	Ta		Domorles
(inches)	Color (moist)			or (moist)	%	<u>Type</u> ¹	LOC	<u>Texture</u>		Remarks
<u>0-16"</u>	10YR 3/3	100%	-					gr sa lo		No redox features
					_					
					-					
	-		-							
	-									
1Typo: C-C	concentration, D=D	onlotion P	M-Pod	ucod Matrix C	S-Covere	d or Coat	nd Sand G	raine	² l oc	ation: PL=Pore Lining, M=Matrix.
	Indicators: (Appl						d Sand G			s for Problematic Hydric Soils ³ :
☐ Histosol				Sandy Redox (ou.,				Muck (A10)
	oipedon (A2)			Stripped Matrix						Parent Material (TF2)
☐ Black His				_oamy Mucky N	, ,) (except	MLRA 1)			(Explain in Remarks)
	en Sulfide (A4)			_oamy Gleyed			,			,
☐ Depleted	d Below Dark Surfa	ice (A11)		Depleted Matrix	(F3)					
	ark Surface (A12)			Redox Dark Su	. ,					s of hydrophytic vegetation and
-	Mucky Mineral (S1)			Depleted Dark		7)				nd hydrology must be present,
•	Bleyed Matrix (S4)		I	Redox Depress	ions (F8)				unless	s disturbed or problematic.
	Layer (if present):									
			_							
Depth (in	iches):		_					Hydrid	c Soil	Present? Yes ☐ No ⊠
Remarks: Th	ne hydric soil criteri	on is not n	net beca	ause of the higl	n chroma	of the soil	profile.			
HYDROLO)GY									
	drology Indicator	c·								
			radi ah	aak all that ann	l. A				Caaan	dom (Indicators (2 or more required)
	cators (minimum of	r one requi	rea; cne			(Da) (dary Indicators (2 or more required)
☐ Surface				☐ Water-Sta			xcept ML	KA	∐ VVa	ater-Stained Leaves (B9) (MLRA 1, 2,
_	ater Table (A2)				A, and 4B)		i		4A, and 4B)
☐ Saturation ☐ Water M				☐ Salt Crust	` '	- (D40)		-		ainage Patterns (B10)
	, ,			☐ Aquatic In						y-Season Water Table (C2)
	nt Deposits (B2)			☐ Hydrogen			Lista a Daa		_	turation Visible on Aerial Imagery (C9)
	posits (B3)			Oxidized F		_	_	its (C3)		comorphic Position (D2)
	at or Crust (B4)			☐ Presence				ا ۱		allow Aquitard (D3)
	oosits (B5)			Recent Iro			,	•		C-Neutral Test (D5)
	Soil Cracks (B6)	l lmagan, /	D7\	☐ Stunted or			I) (LKK A) [ised Ant Mounds (D6) (LRR A)
	on Visible on Aeria / Vegetated Conca		,	☐ Other (Exp	nam in Re	marks)		I		ost-Heave Hummocks (D7)
☐ Sparsely Field Obser		ve Sunace	(00)							
		V □	Na 🔽	Danth (in ab a	-1.					
Surface Wat			No ⊠	Depth (inche	,					
Water Table			No 🖂	Depth (inche	,					
Saturation P		Yes	No 🛚	Depth (inche	s): <u>12"</u>		Wetl	and Hydr	rology	Present? Yes 🗌 No 🗵
	pillary fringe) ecorded Data (strea	ım gauge	monitor	ing well, aerial	photos. nr	evious ins	spections)	if availah	ole:	
				g, ac.iai	,, p.		,,			
Remarke: No	o hydrology or eyid	lanca of w	atland h	vdrology in the	A horizon	or on the	curface 1	Nator attr	hotudi	to rainfall prior to site visit
Remarks: No	o hydrology or evid	lence of we	etland h	ydrology in the	A horizon	or on the	surface. \	Nater attr	ibuted	to rainfall prior to site visit.
Remarks: No	o hydrology or evid	lence of we	etland h	ydrology in the	A horizon	or on the	surface. \	Vater attr	ibuted	to rainfall prior to site visit.
Remarks: No	o hydrology or evid	lence of we	etland h	ydrology in the	A horizon	or on the	surface. \	Vater attr	ributed	to rainfall prior to site visit.

Project/Site: Bond Road/SR 305	: Poulsbo,	Kitsap	Sampling Date: 2/2011 6-2016				
Applicant/Owner: Edward Rose and Sons				State: WA	Sampling Point: TH 17		
Investigator(s): J. Bartlett			Section, To	ownship, Range: <u>S 10 & 11</u>	T 26 N, R 1E	i.	
Landform (hillslope, terrace, etc.): hillslope		Local relie	ef (concave,	convex, none): undulating		Slope (%): <u>5%</u>	
Subregion (LRR): MLRA 2	Lat:			Long:	Da	Datum:	
Soil Map Unit Name: 41 Poulsbo gravelly sandy loam, 15-30							
Are climatic / hydrologic conditions on the site typical for this							
Are Vegetation, Soil, or Hydrology sign	-			ormal Circumstances" prese	ent? Yes⊠	No □	
Are Vegetation, Soil, or Hydrology natur				ed, explain any answers in			
SUMMARY OF FINDINGS – Attach site map s						features, etc.	
			<u> </u>	, ,			
Hydrophytic Vegetation Present? Yes ⊠ No ☐		Is th	e Sampled	Area			
Hydric Soil Present? Yes ☐ No ☐ Wetland Hydrology Present? Yes ☐ No ☐		with	in a Wetlar	nd? Yes ☐ No			
Remarks: Upland area west of Wetland C. Young forest w	ith trees ius	t over 20 fe	eet shrubs :	and herbaceous cover)			
Tromanor opiana area meet er tromana er tromig terest tr	000 , 00		, o abo	aa			
VEGETATION – Use scientific names of plant	:S.						
	Absolute	Dominant	Indicator	Dominance Test works	heet:		
<u>Tree Stratum</u> (Plot size: <u>30 feet</u>)	% Cover			Number of Dominant Spe			
1. Alnus rubra				That Are OBL, FACW, or	FAC: <u>3</u>	(A)	
2. Frangula purshiana				Total Number of Domina			
3				Species Across All Strata	ı: <u>4</u>	(B)	
4		= Total C		Percent of Dominant Spe		(4 (5)	
Sapling/Shrub Stratum (Plot size: 30' diameter)	13 /0	= 10tai O	Ovei	That Are OBL, FACW, or	FAC: <u>75</u>	(A/B)	
Rubus spectabilis	30%	Yes	FAC	Prevalence Index works	sheet:		
2. Rubus armeniacus	5%	No	FAC	Total % Cover of:	Mult	iply by:	
3				OBL species			
4				FACW species			
5				FACULARISIS			
Herb Stratum (Plot size: 30 feet)	35%	= Total C	over	FACU species			
1. Phalaris arundinacea	80%	Yes	FACW	Column Totals:		(B)	
2. Rubus ursinus	30%		FACU	Column Totals.	(//)	(5)	
3				Prevalence Index =			
4				Hydrophytic Vegetation			
5				□ Dominance Test is > 1 □ Dominance Test is >			
6				☐ Prevalence Index is		La casa a satta a	
7				☐ Morphological Adapta data in Remarks			
8				☐ Wetland Non-Vascula		ŕ	
9				☐ Problematic Hydroph	ytic Vegetation	n¹ (Explain)	
10				¹ Indicators of hydric soil a			
11		= Total C		be present, unless distur	bed or problen	natic.	
Woody Vine Stratum (Plot size:)	11070	- rotar o	0.00				
1				Hydrophytic			
2				Vegetation Present? Yes	⊠ No □		
% Bare Ground in Herb Stratum	= Total Cover				- -		
Remarks: Hydrophytic vegetation criterion is met because	there is area	ater than 50	0% domina	L nce by FAC and FACW spe	ecies.		
, , , ,	3			,			

Profile Description: (Describe to the d	epth needed to document the indicator or co	onfirm the absence of indicators.)
Depth Matrix	Redox Features	<u> </u>
(inches) Color (moist) %	Color (moist) % Type ¹ Loc	
<u>0-12"</u> <u>10YR 3/3</u> <u>100%</u>		gr sa lo
<u>12-16"</u> <u>10YR 3/6</u> <u>100%</u>		gr sa lo
		
	· 	
	·	
	M=Reduced Matrix, CS=Covered or Coated Sa	
Hydric Soil Indicators: (Applicable to		Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Sandy Redox (S5)	2 cm Muck (A10)
Histic Epipedon (A2)	Stripped Matrix (S6)	Red Parent Material (TF2) Other (Explain in Remarks)
☐ Black Histic (A3) ☐ Hydrogen Sulfide (A4)	☐ Loamy Mucky Mineral (F1) (except MLR☐ Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
☐ Depleted Below Dark Surface (A11)	Depleted Matrix (F3)	
☐ Thick Dark Surface (A12)	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and
☐ Sandy Mucky Mineral (S1)	☐ Depleted Dark Surface (F7)	wetland hydrology must be present,
☐ Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):		
Type:	<u> </u>	
Depth (inches):	<u></u>	Hydric Soil Present? Yes ☐ No ☒
Remarks: The hydric soil criterion is not r	net because of the high chroma of the soil profile	е.
-		
HYDROLOGY		
Wetland Hydrology Indicators:		
Wetland Hydrology Indicators: Primary Indicators (minimum of one requ		Secondary Indicators (2 or more required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requ ☐ Surface Water (A1)	☐ Water-Stained Leaves (B9) (except	t MLRA Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators: Primary Indicators (minimum of one requ Surface Water (A1) High Water Table (A2)	☐ Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B)	t MLRA Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requ ☐ Surface Water (A1) ☐ High Water Table (A2) ☐ Saturation (A3)	☐ Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) ☐ Salt Crust (B11)	water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requications) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	 □ Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) 	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requestions) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	 □ Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) 	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	 Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living 	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Roots (C3) □ Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requication Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	 Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) 	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requestion Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	 Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil 	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) s (C6) □ FAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requestion Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	 Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Stunted or Stressed Plants (D1) (LF 	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) s (C6) □ FAC-Neutral Test (D5) RR A) □ Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requestion Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery	□ Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soil □ Stunted or Stressed Plants (D1) (LF	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) s (C6) □ FAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requication Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface	□ Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) □ Salt Crust (B11) □ Aquatic Invertebrates (B13) □ Hydrogen Sulfide Odor (C1) □ Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) □ Recent Iron Reduction in Tilled Soil □ Stunted or Stressed Plants (D1) (LF	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) s (C6) □ FAC-Neutral Test (D5) RR A) □ Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requication Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations:		Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) s (C6) □ FAC-Neutral Test (D5) RR A) □ Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requications) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Yes		Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) s (C6) □ FAC-Neutral Test (D5) RR A) □ Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requication Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Yes Water Table Present?	Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Stunted or Stressed Plants (D1) (LF (B7) Other (Explain in Remarks) (B8)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) s (C6) □ FAC-Neutral Test (D5) RR A) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requication Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Water Table Present? Yes Saturation Present?	Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Stunted or Stressed Plants (D1) (LF (B7) Other (Explain in Remarks) (B8)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) s (C6) □ FAC-Neutral Test (D5) RR A) □ Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators: Primary Indicators (minimum of one requications) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes (includes capillary fringe)	Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Stunted or Stressed Plants (D1) (LF (B7) Other (Explain in Remarks) (B8)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D2) □ Shallow Aquitard (D3) s (C6) □ FAC-Neutral Test (D5) RR A) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7) Wetland Hydrology Present? Yes □ No ☑
Wetland Hydrology Indicators: Primary Indicators (minimum of one requication Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Water Table Present? Yes Saturation Present? Yes (includes capillary fringe)	Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Stunted or Stressed Plants (D1) (LF (B7) Other (Explain in Remarks) (B8) No ☑ Depth (inches): No ☑ Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D2) □ Shallow Aquitard (D3) s (C6) □ FAC-Neutral Test (D5) RR A) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7) Wetland Hydrology Present? Yes □ No ☑
Wetland Hydrology Indicators: Primary Indicators (minimum of one requications) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge,	Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Stunted or Stressed Plants (D1) (LF (B7) Other (Explain in Remarks) (B8) No ☑ Depth (inches): No ☑ Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) s (C6) □ FAC-Neutral Test (D5) RR A) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7) Wetland Hydrology Present? Yes □ No ☑ ons), if available:
Wetland Hydrology Indicators: Primary Indicators (minimum of one requications) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Yes □ Water Table Present? Yes □ Saturation Present? Yes □ (includes capillary fringe) Describe Recorded Data (stream gauge,	Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Stunted or Stressed Plants (D1) (LF (B7)) Other (Explain in Remarks) (B8) No ☑ Depth (inches): No ☑ Depth (inches): Depth (inches): monitoring well, aerial photos, previous inspecti	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) s (C6) □ FAC-Neutral Test (D5) RR A) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7) Wetland Hydrology Present? Yes □ No ☑ ons), if available:
Wetland Hydrology Indicators: Primary Indicators (minimum of one requications) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge,	Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Stunted or Stressed Plants (D1) (LF (B7)) Other (Explain in Remarks) (B8) No ☑ Depth (inches): No ☑ Depth (inches): Depth (inches): monitoring well, aerial photos, previous inspecti	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Shallow Aquitard (D3) s (C6) □ FAC-Neutral Test (D5) RR A) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7) Wetland Hydrology Present? Yes □ No ☑ ons), if available:

Project/Site: Bond Road/SR 305	(City/Cou	unty: <u>Poulsbo,</u>	Kitsap	Sampling Date: 2/2011 6-2016	
Applicant/Owner: Edward Rose and Sons	oplicant/Owner: Edward Rose and Sons				Sampling Point: TH 18	
Investigator(s): <u>J. Bartlett</u>			Section, To	ownship, Range: <u>S 10 & 11</u>	, T 26 N, R 1E.	
Landform (hillslope, terrace, etc.): hillslope		Local r	elief (concave	, convex, none): undulating	Slope (%): <u>5%</u>	
Subregion (LRR): MLRA 2						
Soil Map Unit Name: 41 Poulsbo gravelly sandy loam, 15-30						
Are climatic / hydrologic conditions on the site typical for this	s time of yea	ar? Yes	⊠ No □ (I	If no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrology sign	nificantly disf	turbed?	Are "No	ormal Circumstances" pres	ent? Yes ⊠ No □	
Are Vegetation, Soil, or Hydrology natu	rally probler	matic?	(If need	ed, explain any answers in	Remarks.)	
SUMMARY OF FINDINGS - Attach site map	showing	samp	ling point l	ocations, transects,	important features, etc.	
Hydrophytic Vegetation Present? Yes ⊠ No □						
Hydric Soil Present? Yes ☐ No ☐			s the Sampled		- 17	
Wetland Hydrology Present? Yes ☐ No ☒		Vv	vithin a Wetlar	nd? Yes ☐ No		
Remarks: Upland area south of Wetland C.						
VEGETATION – Use scientific names of plant				_		
Tree Stratum (Plot size: 30 feet)	Absolute % Cover		ant Indicator es? Status	Dominance Test works		
1. Alnus rubra			FAC	Number of Dominant Sports Are OBL, FACW, or		
2.						
3.				Total Number of Domina Species Across All Strata		
4				Paraent of Dominant Co.		
	5%			Percent of Dominant Spe That Are OBL, FACW, o		
Sapling/Shrub Stratum (Plot size: 30' diameter)	000/	V	F40	Prevalence Index work	chooti	
Rubus spectabilis Rubus armeniacus			<u>FAC</u>		Multiply by:	
3					x 1 =	
4.				,	x 2 =	
5					x 3 =	
	100%	= Tota	al Cover	FACU species	x 4 =	
Herb Stratum (Plot size: <u>30 feet</u>)				UPL species	x 5 =	
1				Column Totals:	(A) (B)	
2				Prevalence Index	= B/A =	
3				Hydrophytic Vegetation		
4				□ Dominance Test is >		
5 6				☐ Prevalence Index is		
7.					ations ¹ (Provide supporting	
8.					or on a separate sheet)	
9				☐ Wetland Non-Vascul		
10					nytic Vegetation ¹ (Explain)	
11			<u> </u>	be present, unless distur	and wetland hydrology must bed or problematic.	
Woody Vine Stratum (Plot size:)		= Tota	al Cover	331		
1				Hydrophytic		
2				Vegetation		
			al Cover	Present? Yes	⊠ No □	
% Bare Ground in Herb Stratum 100%						
Remarks: The hydrophytic vegetation criterion is met beca	use there is	greater	than 50% don	ninance by FAC species.		

Depth (inches)	Matrix Color (moist)	%	Colo	Redox Features or (moist) % Type ¹ Lo	oc² Text	rure Remarks
0-10"	10YR 3/3	100%				
					<u>gr sa</u>	
10-16"	10YR 4/6	100%			<u>gr sa</u>	lo
				duced Matrix, CS=Covered or Coated S		² Location: PL=Pore Lining, M=Matrix.
-		licable to	all LRR	ts, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
Histosol	, ,			Sandy Redox (S5)		2 cm Muck (A10)
	pipedon (A2)			Stripped Matrix (S6)		Red Parent Material (TF2)
	istic (A3)			Loamy Mucky Mineral (F1) (except ML	RA 1)	Other (Explain in Remarks)
_ , ,	en Sulfide (A4) d Below Dark Surfa	oco (Δ11)		Loamy Gleyed Matrix (F2) Depleted Matrix (F3)		
	ark Surface (A12)	ice (ATT)		Redox Dark Surface (F6)		³ Indicators of hydrophytic vegetation and
	Mucky Mineral (S1)			Depleted Dark Surface (F7)		wetland hydrology must be present,
	Gleyed Matrix (S4)			Redox Depressions (F8)		unless disturbed or problematic.
	Layer (if present)	:		, , ,		•
Type:						
	nches):				Hvo	dric Soil Present? Yes ☐ No ⊠
Pomorko: T	ha hydria aail aritar	ion io not	mot hoo	ause of the high chroma of the soil prof	ilo	
	ne nyane son anter		met bec	ause of the high officina of the son pro-	ne.	
YDROLO	,		met bec	duse of the high officina of the son pro-	iie.	
	,		met bec	adde of the high officina of the soil prof	iie.	
Wetland Hy	OGY	s:			iie.	Secondary Indicators (2 or more required)
Wetland Hy	DGY ydrology Indicator icators (minimum o	s:		eck all that apply)		
Wetland Hy Primary Indi ☐ Surface	DGY ydrology Indicator icators (minimum o	s:				Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
Vetland Hy Primary Indi ☐ Surface ☐ High Wa	OGY ydrology Indicator icators (minimum o Water (A1) ater Table (A2)	s:		eck all that apply) Water-Stained Leaves (B9) (exceptions)		☐ Water-Stained Leaves (B9) (MLRA 1, 2
Wetland Hy Primary Indi ☐ Surface ☐ High Wa	OGY Idrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3)	s:		eck all that apply) Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B)		
Wetland Hy Primary Indi ☐ Surface ☐ High Wa ☐ Saturatio ☐ Water M	OGY Idrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3)	s:		eck all that apply) Water-Stained Leaves (B9) (except 1, 2, 4A, and 4B) Salt Crust (B11)		☐ Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
Vetland Hy Primary Indi Surface High Wa Saturati Water M Sedimen	OGY /drology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) /darks (B1)	s:		eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13)	ot MLRA	 □ Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (CS)
Wetland Hy Primary Indi Surface High Wa Saturation Water M Sedimen Drift De	or (A3) Marks (B1) nt Deposits (B2)	s:		eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	ot MLRA	 □ Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (CS)
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimel Drift Dep	order (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	s:		eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4)	ot MLRA	 □ Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3)
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Drift Dep Algal Ma	or (A3) Marks (B1) posits (B3)	s:		eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir	ot MLRA ng Roots (C3) ills (C6)	 □ Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (CS) □ Geomorphic Position (D2)
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Drift Der Algal Ma Iron Der	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	s: f one requ	uired; ch	eck all that apply) Water-Stained Leaves (B9) (exception 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	ot MLRA ng Roots (C3) ills (C6)	 □ Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (CS) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5)
Wetland Hy Primary Indi Surface High Wa Saturati Water N Sedimel Drift Dep Algal Ma Iron Dep Surface	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6)	s: f one requ	uired; ch	eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L	ot MLRA ng Roots (C3) ills (C6)	Water-Stained Leaves (B9) (MLRA 1, 2
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimel Drift Dep Algal Ma Iron Dep Surface Inundati	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca	s: f one requ	uired; ch	eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L	ot MLRA ng Roots (C3) ills (C6)	Water-Stained Leaves (B9) (MLRA 1, 2
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca	s: f one requ I Imagery ve Surfac	uired; ch	eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L	ot MLRA ng Roots (C3) ills (C6)	Water-Stained Leaves (B9) (MLRA 1, 2
Wetland Hy Primary Indi Surface High Wa Saturati Water N Sedimer Drift Der Algal Ma Iron Der Surface Inundati Sparsely Field Obser	ydrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Concarvations: ter Present?	s: f one requ I Imagery ve Surfac	uired; ch	eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L	ot MLRA ng Roots (C3) ills (C6)	Water-Stained Leaves (B9) (MLRA 1, 2
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimel Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Field Obset Surface Water Table	or various: Jogy Jordology Indicator Jordology Indicator Jordology Indicator Jordology Indicator Water (A1) Jordology Indicator Water (A2) Jordology Indicator Jordolog	s: f one requ I Imagery ve Surfac Yes Yes Yes	(B7) e (B8) No ⊠ No ⊠	eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L	ot MLRA ng Roots (C3 ills (C6) LRR A)	 □ Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (CS) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Primary Indi Surface High Wa Saturation Water Marcon Drift Department Algal Marcon Iron Department Surface Inundati Sparsely Field Obsel Surface Warder Table Saturation Found Saturation Found Control Control	JOGY Jordology Indicator Jordology Indicator Jordology Indicator Jordology Indicator Water (A1) Jordology Indicator Water (A1) Jordology Indicator	s: f one requ I Imagery ve Surfac Yes Yes Yes Yes Yes Yes Yes	(B7) e (B8) No 🖂 No 🖂	eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L	ot MLRA ng Roots (C3 iils (C6) LRR A) Wetland H	Water-Stained Leaves (B9) (MLRA 1, 2
Wetland Hy Primary Indi Surface High Wa Saturati Water N Sedimer Drift Der Algal Ma Iron Der Surface Inundati Sparsely Field Obser Surface Wa Water Table Saturation F (includes ca	JOGY Jordology Indicator Jordology Indicator Jordology Indicator Jordology Indicator Water (A1) Jordology Indicator Water (A1) Jordology Indicator	s: f one requ I Imagery ve Surfac Yes Yes Yes Yes Yes Yes Yes	(B7) e (B8) No 🖂 No 🖂	eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L	ot MLRA ng Roots (C3 iils (C6) LRR A) Wetland H	Water-Stained Leaves (B9) (MLRA 1, 2
Wetland Hy Primary Indi Surface High Wa Saturati Water N Sedimer Drift Der Algal Ma Iron Der Surface Inundati Sparsely Field Obser Surface Wa Water Table Saturation F (includes ca	JOGY Jordology Indicator Jordology Indicator Jordology Indicator Jordology Indicator Water (A1) Jordology Indicator Water (A1) Jordology Indicator	s: f one requ I Imagery ve Surfac Yes Yes Yes Yes Yes Yes Yes	(B7) e (B8) No 🖂 No 🖂	eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L	ot MLRA ng Roots (C3 iils (C6) LRR A) Wetland H	Water-Stained Leaves (B9) (MLRA 1, 2
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Wa Water Table Saturation F (includes ca	pdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerially Vegetated Concarvations: ter Present? Present? Present? Present? Present? Present? Present? Present?	I Imagery ve Surfac Yes Yes Yes Yes Am gauge,	(B7) e (B8) No No No monitor	eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L	ot MLRA ng Roots (C3) ills (C6) LRR A) Wetland H tions), if avai	Water-Stained Leaves (B9) (MLRA 1, 2
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Wa Water Table Saturation F (includes ca	pdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerially Vegetated Concarvations: ter Present? Present? Present? Present? Present? Present? Present? Present?	I Imagery ve Surfac Yes Yes Yes Yes Am gauge,	(B7) e (B8) No No No monitor	eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): Depth (inches):	ot MLRA ng Roots (C3) ills (C6) LRR A) Wetland H tions), if avai	Water-Stained Leaves (B9) (MLRA 1, 2
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Wa Water Table Saturation F (includes ca	pdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerially Vegetated Concarvations: ter Present? Present? Present? Present? Present? Present? Present? Present?	I Imagery ve Surfac Yes Yes Yes Yes Am gauge,	(B7) e (B8) No No No monitor	eck all that apply) Water-Stained Leaves (B9) (except, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): Depth (inches):	ot MLRA ng Roots (C3) ills (C6) LRR A) Wetland H tions), if avai	Water-Stained Leaves (B9) (MLRA 1, 2

Project/Site: Bond Road/SR 305	(City/County	/: Poulsbo, I	Kitsap	Sampling Date: 2/2011 6-2016		
Applicant/Owner: Edward Rose and Sons				State: WA	Sampling Point: <u>TH 19</u>		
Investigator(s): <u>J. Bartlett</u>			Section, To	ownship, Range: <u>S 10 & 11</u>	<u>, T 26 N, R 1E</u>	<u>.</u>	
Landform (hillslope, terrace, etc.): hillslope		Local relie	ef (concave,	convex, none): undulating	;	Slope (%): <u>5%</u>	
Subregion (LRR): MLRA 2	_ Lat:			Long:	Da	atum:	
Soil Map Unit Name: 41 Poulsbo gravelly sandy loam, 15-30	-30% slopes			NWI classificat			
Are climatic / hydrologic conditions on the site typical for this							
Are Vegetation, Soil, or Hydrology sign	-			ormal Circumstances" prese	ent? Yes ⊠	No □	
Are Vegetation, Soil, or Hydrology natu			(If neede	ed, explain any answers in	Remarks.)		
SUMMARY OF FINDINGS – Attach site map s			•	•	•	features, etc.	
Hydrophytic Vegetation Present? Yes ⊠ No □							
Hydric Soil Present? Yes ☐ No ☒			e Sampled				
Wetland Hydrology Present? Yes ☐ No ☒		with	in a Wetlan	nd? Yes ☐ No	, M		
Remarks: Upland area northwest of Wetland C between th	e wetland a	nd the old i	road.				
VEGETATION – Use scientific names of plant							
Tree Stratum (Plot size: 30 feet)	Absolute % Cover			Dominance Test works			
1		-		Number of Dominant Spe That Are OBL, FACW, or		(A)	
2						(,	
3				Total Number of Dominal Species Across All Strata		(B)	
4				Percent of Dominant Spe	acias		
Cooling/Chruib Ctratum (Dlat circu 20' diameter)		= Total C	over	That Are OBL, FACW, or		(A/B)	
Sapling/Shrub Stratum (Plot size: 30' diameter) 1. Rubus spectabilis	60%	Vas	FΔC	Prevalence Index works	sheet:		
Rubus armeniacus				Total % Cover of:		tiply by:	
3				OBL species			
4				FACW species			
5				FAC species	x 3 = _		
Hark Charture (Plat size, 20 fact)	85%	= Total C	over	FACU species			
Herb Stratum (Plot size: 30 feet) 1. Phalaris arundinacea	40%	Voc	EACW/	UPL species			
Juncus effusus	10%		FACW	Column Totals:	(A)	(B)	
3				Prevalence Index =	= B/A =		
4				Hydrophytic Vegetation	Indicators:		
5				□ Dominance Test is > 1			
6				Prevalence Index is			
7				☐ Morphological Adapta data in Remarks			
8				☐ Wetland Non-Vascula		210 011001)	
9				☐ Problematic Hydroph	ytic Vegetatic	on¹ (Explain)	
10				¹ Indicators of hydric soil a			
11	50%			be present, unless distur	oed or proble	matic.	
Woody Vine Stratum (Plot size:)	30 70	= Total O	OVCI				
1				Hydrophytic			
2				Vegetation Present? Yes	⊠ No □		
% Bare Ground in Herb Stratum 50%		= Total C	over		_		
Remarks: The hydrophytic vegetation criterion is met beca	use there is	greater tha	an 50% dom	Ininance by FAC and FACW	species.		
					-		

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Tupe	· - · - ·	Color (moist)	%	Color	Redox Features (moist) % Tv	rpe ¹ Loc ²	Textu	re	Remarks
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	0-16"	, , , , , , , , , , , , , , , , , , , ,		·	<u> </u>				
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Sandy Redox (S5) Stripped Matrix (S6) Black Histic (A3) Depleted Blow Dark Surface (A11) Depleted Below Dark Surface (A12) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) wetland Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Below Depleted Dark Surface (F8) Below Depleted Dark Surface (B8) Below Depleted Dark Surface (B	7-10	1011(3/1	10070				38 10		
Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators:		-		·					
Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators:									
Nydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators (Histosol (A1) Sandy Redox (\$5) 2 cm Mi. Histic Epipedon (A2) Stripped Matrix (\$6) Red Pai Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Other (E Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Pindicators of the Strictive Layer (if present): Redox Dark Surface (F7) wetland unless of testrictive Layer (if present): Type:									
Nydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators (Histosol (A1) Sandy Redox (\$5) 2 cm Mi. Histic Epipedon (A2) Stripped Matrix (\$6) Red Pai Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Other (E Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Pindicators of the Strictive Layer (if present): Redox Dark Surface (F7) wetland unless of testrictive Layer (if present): Type:									
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators (Histosol (A1) Sandy Redox (\$55 2 cm Mi. Histic Epipedon (A2) Stripped Matrix (\$60) Red Pai Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Other (E Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Pindicators (Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland (Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless of Restrictive Layer (if present): Type:									
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators (Histosol (A1) Sandy Redox (\$55 2 cm Mi. Histic Epipedon (A2) Stripped Matrix (\$60) Red Pai Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Other (E Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Pindicators (Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland (Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless of Restrictive Layer (if present): Type:		_							
Aydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators (Histosol (A1)				· -			_		
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators (Histosol (A1) Sandy Redox (\$55 2 cm Mi. Histic Epipedon (A2) Stripped Matrix (\$60) Red Pai Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Other (E Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Pindicators (Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland (Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless of Restrictive Layer (if present): Type:				. <u></u>					
Histosol (A1)	Type: C=C	Concentration, D=De	epletion, RI	M=Redu	ced Matrix, CS=Covered or	Coated Sand	Grains.	² Loc	ation: PL=Pore Lining, M=Matrix.
Histic Epipedon (A2)	lydric Soil	Indicators: (Appli	icable to a	all LRRs,	unless otherwise noted.)		Ir	ndicato	rs for Problematic Hydric Soils ³ :
Black Histic (A3)	Histosol	(A1)		☐ Sa	andy Redox (S5)] 2 cm	Muck (A10)
Hydrogen Sulfide (A4)									Parent Material (TF2)
Depleted Below Dark Surface (A11)		, ,				xcept MLRA 1	I) [Othe	r (Explain in Remarks)
Thick Dark Surface (A12) □ Redox Dark Surface (F6) ³Indicators of wetland Sandy Mucky Mineral (S1) □ Depleted Dark Surface (F7) wetland Sandy Gleyed Matrix (S4) □ Redox Depressions (F8) unless destrictive Layer (if present): Type: □ Depth (inches): □ Hydric Soil Criterions is not met because the soil does not have depleted matrix characteristics or referrance. The hydric soil criterions is not met because the soil does not have depleted matrix characteristics or referrance. The hydric soil criterions is not met because the soil does not have depleted matrix characteristics or referrance. The hydric soil criterions is not met because the soil does not have depleted matrix characteristics or referrance. The hydric soil criterions is not met because the soil does not have depleted matrix characteristics or referrance. The hydric soil criterions is not met because the soil does not have depleted matrix characteristics or referrance. The hydric soil criterions is not met because the soil does not have depleted matrix characteristics or referrance. The hydric soil creater the hydric soil creater the hydric soil does not have depleted matrix characteristics or referrance. The hydric soil creater the hydric soil processed thanks (B9) (except MLRA □ Water-Stained Leaves (B9) (except MLRA □ Water-Stained Leaves (B9) (except MLRA □ Water-Stained Leaves (B9) (except MLRA □ Prain □		, ,							
Sandy Mucky Mineral (S1)	•		ce (A11)				3,		
Sandy Gleyed Matrix (S4)		, ,					า		rs of hydrophytic vegetation and
Restrictive Layer (if present): Type:					. ,				nd hydrology must be present, s disturbed or problematic.
Type:	-	• , ,			edox Depressions (1 0)			unies	s disturbed of problematic.
Depth (inches):									
POROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Seconda Surface Water (A1) High Water Table (A2) Saturation (A3) Salt Crust (B11) Water-Stained Leaves (B9) (except MLRA Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Aquatic Invertebrates (B13) Presence of Reduced Iron (C4) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raise Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Sedimace Water Present? Yes No Depth (inches): Vater Table Present? Yes No Depth (inches): Sedivation Present? Yes No Depth (inches): Seconda Wetland Hydrology Processor Plants (D1) (LRR A) Seconda Wetland Hydrology Processor Plants (D1) (LRR A) Raise Raturation Present? Yes No Depth (inches): Wetland Hydrology Processor Plants (D1) (LRR A) Raise Raturation Present? Yes No Depth (inches): Raturation Present? Yes No Raturation Present? Yes No Raturation Present? Raturation Present? Yes No Raturation Present? Raturation Present? Yes No Raturation Present? Yes No Raturation Present? Raturation Present							Uncelm	.:- C-!I	Draggert 2 Vac M No 🗆
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Saturation (A3)	Vetland Hy Primary Indi	drology Indicators				39) (except M	LRA		· · · · · · · · · · · · · · · · · · ·
Water Marks (B1) ☐ Aquatic Invertebrates (B13) ☐ Dry-S ☐ Sediment Deposits (B2) ☐ Hydrogen Sulfide Odor (C1) ☐ Satur ☐ Drift Deposits (B3) ☐ Oxidized Rhizospheres along Living Roots (C3) ☐ Geon ☐ Algal Mat or Crust (B4) ☐ Presence of Reduced Iron (C4) ☐ Shalle ☐ Iron Deposits (B5) ☐ Recent Iron Reduction in Tilled Soils (C6) ☐ FAC- ☐ Surface Soil Cracks (B6) ☐ Stunted or Stressed Plants (D1) (LRR A) ☐ Raise ☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in Remarks) ☐ Frost ☐ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): Water Table Present? Yes ☐ No ☒ Depth (inches): Gaturation Present? Yes ☐ No ☒ Depth (inches): Gaturation Present? Yes ☐ No ☒ Depth (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Vetland Hy Primary Indi ☐ Surface	drology Indicators icators (minimum of Water (A1)			☐ Water-Stained Leaves (B	39) (except MI	LRA		ater-Stained Leaves (B9) (MLRA 1, 2,
□ Sediment Deposits (B2) □ Hydrogen Sulfide Odor (C1) □ Satur □ Drift Deposits (B3) □ Oxidized Rhizospheres along Living Roots (C3) □ Geon □ Algal Mat or Crust (B4) □ Presence of Reduced Iron (C4) □ Shallu □ Iron Deposits (B5) □ Recent Iron Reduction in Tilled Soils (C6) □ FAC-□ Surface Soil Cracks (B6) □ Stunted or Stressed Plants (D1) (LRR A) □ Raise □ Inundation Visible on Aerial Imagery (B7) □ Other (Explain in Remarks) □ Frost □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No □ Depth (inches): □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Vetland Hy Primary Indi ☐ Surface ☐ High Wa	rdrology Indicators icators (minimum of Water (A1) ater Table (A2)			☐ Water-Stained Leaves (B 1, 2, 4A, and 4B)	39) (except M l	LRA	☐ Wa	ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
□ Drift Deposits (B3) □ Oxidized Rhizospheres along Living Roots (C3) □ Geon □ Algal Mat or Crust (B4) □ Presence of Reduced Iron (C4) □ Shalle □ Iron Deposits (B5) □ Recent Iron Reduction in Tilled Soils (C6) □ FAC-□ Surface Soil Cracks (B6) □ Stunted or Stressed Plants (D1) (LRR A) □ Raise □ Inundation Visible on Aerial Imagery (B7) □ Other (Explain in Remarks) □ Frost □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No □ Depth (inches): □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Vetland Hy Primary Indi Surface High Wa Saturation	rdrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3)			☐ Water-Stained Leaves (B 1, 2, 4A, and 4B) ☐ Salt Crust (B11)		LRA	□ Wa	ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10)
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□ Iron Deposits (B5) □ Recent Iron Reduction in Tilled Soils (C6) □ FAC- □ Surface Soil Cracks (B6) □ Stunted or Stressed Plants (D1) (LRR A) □ Raise □ Inundation Visible on Aerial Imagery (B7) □ Other (Explain in Remarks) □ Frost □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No ☑ Depth (inches): □ □ Water Table Present? Yes □ No ☑ Depth (inches): □ □ Saturation Present? Yes □ No ☑ Depth (inches): □ □ □ Staturation Present? Yes □ No ☑ Depth (inches): □ □ □ □ □ Security Staturation Present? Yes □ No ☑ Depth (inches): □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Vetland Hy Primary Indi Surface High Wa Saturati Water M Sedimen	rdrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2)			Water-Stained Leaves (B 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B1 Hydrogen Sulfide Odor (6	13) C1)		☐ Wa	ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9
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Remarks: No hydrology present during field visit and no evidence of wetland hydrology.	Wetland Hy Primary Indi Surface High Wa Saturati Water N Sedimel Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Field Obset Surface Wa Water Table Saturation F	rdrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) farks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial by Vegetated Concavervations: ter Present? Present?	Imagery (Ive Surface	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Water-Stained Leaves (B 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B1 Hydrogen Sulfide Odor (C) Oxidized Rhizospheres a Presence of Reduced Iro Recent Iron Reduction in Stunted or Stressed Plan Other (Explain in Remark	13) C1) along Living Roon (C4) a Tilled Soils (Chts (D1) (LRR	oots (C3) C6) A)	☐ Wa	ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (CS) comorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ast-Heave Hummocks (D7)
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RATING SUMMARY – Western Washington

Name of wetland (or ID #): <u>Wetla</u>	ınd A	Date of site visit: _4	/2020
Rated by: <u>J Bartlett</u> T	, ,	_	
HGM Class used for rating: Slope	Wetland	d has multiple HGM clas	sses? <u> </u>
NOTE: Form is not complet	e without the figures r	equested (figures can k	pe combined).
Source of base aerial ph	oto/map: <u>Google Ea</u>	rth	
OVERALL WETLAND CATEGO	NDV: III — (basadası	f and an V	al alca ca al a dalda a N
OVERALL WEILAND CATEGO	This is a consequent	functions X or specia	al characteristics of

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		nprov ter Q	ing uality	Н	ydrolo	ogic		Habita	at	
					Circle	the ap	propr	iate ra	tings	
Site Potential	Н	М	L	Н	М	L	Н	M	L	
Landscape Potential	Н	М	L	Н	М	L	Н	М	<u>L</u>	
Value	<u>H</u>	М	L	H	М	L	<u>H</u>	М	L	TOTAL
Score Based on Ratings		5			5			6		16

Score for each function based on three ratings (order of ratings is not *important*) 9 = H,H,H8 = H,H,M7 = H,H,L 7 = H, M, M6 = H,M,L6 = M,M,M5 = H,L,L5 = M,M,L4 = M, L, L3 = L, L, L

2. Category based on SPECIAL CHARACTERISTICS of wetland

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

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (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	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (can be added to another figure)	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R 3.1	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	R 3.2, R 3.3	

Lake Fringe Wetlands

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

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	2, 6
Hydroperiods	H 1.2	6
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	6
Plant cover of dense , rigid trees, shrubs, and herbaceous plants	S 4.1	6
(can be added to figure above)		
Boundary of 150 ft buffer (can be added to another figure)	S 2.1, S 5.1	6
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	8
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	10
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	10

HGM Classification of Wetlands in Western Washington

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

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

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

NO – go to 2

YES – the wetland class is **Tidal Fringe** – go to 1.1

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

NO - Saltwater Tidal Fringe (Estuarine)

YES - Freshwater Tidal Fringe

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

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

NO – go to 3

YES – The wetland class is **Flats**

If your wetland can be classified as a Flats wetland, use the form for **Depressional** wetlands.

- 3. Does the entire wetland unit **meet all** of the following criteria?
 - __The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size;
 - At least 30% of the open water area is deeper than 6.6 ft (2 m).

NO – go to 4

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

- 4. Does the entire wetland unit **meet all** of the following criteria?
 - X The wetland is on a slope (*slope can be very gradual*),
 - X The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks,
 - X The water leaves the wetland **without being impounded**.

NO - go to 5

YES - The wetland class is **Slope**

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

- 5. Does the entire wetland unit **meet all** of the following criteria?
 - ___The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river.
 - ___The overbank flooding occurs at least once every 2 years.

NO - go to 6

YES - The wetland class is Riverine

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

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

NO - go to 7

YES – The wetland class is **Depressional**

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

NO - go to 8

YES – The wetland class is **Depressional**

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

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

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

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

SLOPE WETLANDS	
Water Quality Functions - Indicators that the site functions to improve water quality	
S 1.0. Does the site have the potential to improve water quality?	
S 1.1. Characteristics of the average slope of the wetland: (a 1% slope has a 1 ft vertical drop in elevation for every 100 ft of horizontal distance)	0
Slope is 1% or less points = 3	
Slope is > 1%-2% points = 2	
Slope is > 2%-5% points = 1	
Slope is greater than 5% points = 0	
S 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions): Yes = 3 No = 0	3
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollutants:	
Choose the points appropriate for the description that best fits the plants in the wetland. Dense means you	
have trouble seeing the soil surface (>75% cover), and uncut means not grazed or mowed and plants are higher than 6 in.	
Dense, uncut, herbaceous plants > 90% of the wetland area points = 6	
Dense, uncut, herbaceous plants > ½ of area points = 3	
Dense, woody, plants > ½ of area points = 2	
Dense, uncut, herbaceous plants > ¼ of area points = 1	
Does not meet any of the criteria above for plants points = 0	
Total for S 1 Add the points in the boxes above	5

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

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

Rating of Landscape Potential If score is: ___1-2 = M __X __0 = L

Record the rating on the first page

S 3.0. Is the water quality improvement provided by the site valuable to society?	
S 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list? Yes = 1 No = 0	1
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? At least one aquatic resource in the basin is on the $303(d)$ list. Yes = 1 No = 0	1
S 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? <i>Answer YES</i> if there is a TMDL for the basin in which unit is found. Yes = 2 No = 0	2
Total for S 3 Add the points in the boxes above	4

Rating of Value If score is: X 2-4 = H ___1 = M ___0 = L

Record the rating on the first page

^{*}SR 305 is upslope of Wetland A but only 8.3% of the roadway within 150 feet drains toward the wetland. Most of the upslope area is composed of presently undeveloped forest. SR 307 (Bond Road) is also upslope of Wetland A but does not contribute runoff into this wetland because of the ditch and the curb along the west side of the roadway. The curb extends from the intersection of SR 305 and 307 up to the south end of Wetland C. The curb along the highway does not permit water flow into Wetland A or the ditch.

SLOPE WETLANDS	
Hydrologic Functions - Indicators that the site functions to reduce flooding and stream ero	sion
S 4.0. Does the site have the potential to reduce flooding and stream erosion?	
S 4.1. Characteristics of plants that reduce the velocity of surface flows during storms: Choose the points appropriate for the description that best fits conditions in the wetland. Stems of plants should be thick enough (usually > 1/8	0
in), or dense enough, to remain erect during surface flows.	
Dense, uncut, rigid plants cover > 90% of the area of the wetland points = 1	
Rating of Site Potential If score is: 1 = M X 0 = I Record the rating of	l n the first nage

S 5.0. Does the landscape have the potential to support the hydrologic functions of the site?	
S 5.1. Is more than 25% of the area within 150 ft upslope of wetland in land uses or cover that generate excess surface runoff? Yes = 1 No = 0	0*

Rating of Landscape Potential If score is: ___1 = M _X _0 = L

Record the rating on the first page

S 6.0. Are the hydrologic functions provided by the site valuable to society?	
S 6.1. Distance to the nearest areas downstream that have flooding problems: The sub-basin immediately down-gradient of site has flooding problems that result in damage to human or	2
natural resources (e.g., houses or salmon redds) points = 2 Surface flooding problems are in a sub-basin farther down-gradient points = 1 No flooding problems anywhere downstream points = 0	
S 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? Yes = $2 \text{ No} = 0$	0
Total for S 6 Add the points in the boxes above	2

Rating of Value If score is: X 2-4 = H ___1 = M ___0 = L

Record the rating on the first page

NOTES and FIELD OBSERVATIONS:

*SR 305 is upslope of Wetland A but does not contribute stormwater directly to the wetland. Most of the upslope area is composed of presently undeveloped forest. SR 307 (Bond Road) is also upslope of Wetland A but does not contribute runoff into this wetland because of the ditch along the west side of the roadway.

These questions apply to wetlands of all HGM classes.	
HABITAT FUNCTIONS - Indicators that site functions to provide important habitat	
H 1.0. Does the site have the potential to provide habitat?	
H 1.1. Structure of plant community: Indicators are Cowardin classes and strata within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold of % ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked. Aquatic bedEmergentScrub-shrub (areas where shrubs have > 30% cover)Scrub-shrub (areas where shrubs have > 30% cover)Yenested (areas where trees have > 30% cover)If the unit has a Forested class, check if:	1
X The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon	
Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ ac to count (see text for descriptions of hydroperiods). Permanently flooded or inundated Seasonally flooded or inundated Toccasionally flooded or inundate	1
H 1.3. Richness of plant species	1
Count the number of plant species in the wetland that cover at least 10 ft ² . Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle If you counted: > 19 species points = 2 5 - 19 species points = 1 < 5 species points = 0	
H 1.4. Interspersion of habitats Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. If you have four or more plant classes or three classes and open water, the rating is always high.	0
None = 0 points Low = 1 point Moderate = 2 points	
All three diagrams in this row are HIGH = 3points	

Wedana name of namber. 11	
H 1.5. Special habitat features:	4
Check the habitat features that are present in the wetland. The number of checks is the number of points.	
X Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).	
X Standing snags (dbh > 4 in) within the wetland	
X Undercut banks are present for at least 6.6 ft (2 m) and/or overhanging plants extends at least 3.3 ft (1 m)	
over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m)	
Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree	
slope) OR signs of recent beaver activity are present (cut shrubs or trees that have not yet weathered	
where wood is exposed)	
At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are	
permanently or seasonally inundated (structures for egg-laying by amphibians)	
X Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of	
strata)	
Total for H 1 Add the points in the boxes above	7
Rating of Site Potential If score is: 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 the habitat functions of the site?	
· · · · · · · · · · · · · · · · · · ·	1
H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit).	1
Calculate: % undisturbed habitat 9.7 + [(% moderate and low intensity land uses)/2] 2.8 = 12.5 % If total	
accessible habitat is:	
> ¹ / ₃ (33.3%) of 1 km Polygon points = 3	
20-33% of 1 km Polygon points = 2	
10-19% of 1 km Polygon points = 1	
< 10% of 1 km Polygon points = 0	
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.	1
Calculate: % undisturbed habitat 21.5 + [(% moderate and low intensity land uses)/2] 13.8 = 35.3 %	
Undisturbed habitat > 50% of Polygon points = 3	
Undisturbed habitat 10-50% and in 1-3 patches points = 2	
Undisturbed habitat 10-50% and > 3 patches <u>points = 1</u>	
Undisturbed habitat < 10% of 1 km Polygon points = 0	
H 2.3. Land use intensity in 1 km Polygon: If	-2
> 50% of 1 km Polygon is high intensity land use points = (- 2)	
≤ 50% of 1 km Polygon is high intensity points = 0	
Total for H 2 Add the points in the boxes above	<1
Rating of Landscape Potential If score is:4-6 = H1-3 = MX < 1 = L Record the rating on the	e first page
H 3.0. Is the habitat provided by the site valuable to society?	•
H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? Choose only the highest score that applies to the wetland being rated.	
Site meets ANY of the following criteria: points = 2	
$-\!\!\!-\!\!\!\!-\!$	
 It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists) It is mapped as a location for an individual WDFW priority species 	
 It is a Wetland of High Conservation Value as determined by the Department of Natural Resources It has been categorized as an important habitat site in a local or regional comprehensive plan, in a 	
Shoreline Master Plan, or in a watershed plan Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1	
Site does not meet any of the criteria above points = 0	the first was
Rating of Value If score is: X 2 = H 1 = M 0 = L Record the rating on	ıne jirst page

WDFW Priority Habitats

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

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

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

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

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS	la .
Wetland Type	Category
Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.	
SC 1.0. Estuarine wetlands	
Does the wetland meet the following criteria for Estuarine wetlands?	
— The dominant water regime is tidal,	
— Vegetated, and	
— With a salinity greater than 0.5 ppt Yes –Go to SC 1.1 No = Not an estuarine wetland	
SC 1.1. Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151? Yes = Category I No - Go to SC 1.2	Cat. I
SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?	
 The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less than 10% cover of non-native plant species. (If non-native species are Spartina, see page 25) At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un- 	Cat. I
mowed grassland.	Cat. II
— The wetland has at least two of the following features: tidal channels, depressions with open water, or	Cat. II
contiguous freshwater wetlands. Yes = Category I No = Category II	
SC 2.0. Wetlands of High Conservation Value (WHCV)	
SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High	
Conservation Value? Yes – Go to SC 2.2 No – Go to SC 2.3	Cat. I
SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? Yes = Category I No = Not a WHCV	
SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland?	
http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf	
Yes – Contact WNHP/WDNR and go to SC 2.4 No = Not a WHCV	
SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? Yes = Category I No = Not a WHCV	
5 7	
SC 3.0. Bogs	
Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below.</i> If you answer YES you will still need to rate the wetland based on its functions.	
SC 3.1. Does an area within the wetland unit have organic soil horizons, either peats or mucks, that compose 16 in or	
more of the first 32 in of the soil profile? Yes – Go to SC 3.3 No – 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 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 = Is not a bog	
SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30%	
cover of plant species listed in Table 4? Yes = Is a Category I bog No – Go to SC 3.4	
NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that criterion by	
measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the	Cat
plant species in Table 4 are present, the wetland is a bog.	Cat. I
SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, western red cedar,	
western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the species (or combination of species) listed in Table 4 provide more than 30% of the cover under the canopy?	
Yes = Is a Category I bog No = Is not a bog	
103 - 13 a Category I bug NO - 15 Hot a bug	

Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA	
Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate</i>	
the wetland based on its functions.	
— Old-growth forests (west of Cascade crest): Stands of at least two tree species, forming a multi-layered	
canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at least 200 years of	
age OR have a diameter at breast height (dbh) of 32 in (81 cm) or more.	
 Mature forests (west of the Cascade Crest): Stands where the largest trees are 80- 200 years old OR the species that make up the canopy have an average diameter (dbh) exceeding 21 in (53 cm). 	
Yes = Category I No = Not a forested wetland for this section	Cat. I
	Cut.1
C 5.0. Wetlands in Coastal Lagoons	
Does the wetland meet all of the following criteria of a wetland in a coastal 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, less frequently, rocks 	
— The lagoon in which the wetland is located contains ponded water that is saline or brackish (> 0.5 ppt)	
during most of the year in at least a portion of the lagoon (needs to be measured near the bottom)	Cat. I
Yes – Go to SC 5.1 No = Not a wetland in a coastal lagoon	
C 5.1. 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	Cat. II
than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100).	Cat. II
— At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland.	
— The wetland is larger than $^{1}/_{10}$ ac (4350 ft ²)	
Yes = Category I No = Category II	
C 6.0. Interdunal Wetlands	
Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If</i>	
you answer yes you will still need to rate the wetland based on its habitat functions.	
In practical terms that means the following geographic areas:	
— Long Beach Peninsula: Lands west of SR 103	Cat I
 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 	Cati
Yes – Go to SC 6.1 No = not an interdunal wetland for rating	
C 6.1. Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H,H,H or H,H,M	Cat. II
for the three aspects of function)? Yes = Category I No – Go to SC 6.2	
C 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger?	Cat. II
Yes = Category II No – Go to SC 6.3 C 6.3. Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and 1 ac?	Cat. II
Yes = Category III No = Category IV	
5 ·	Cat. I\

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Score Based on

Ratings

RATING SUMMARY – Western Washington

Name of wetland (or ID	#):	Wetla	nd B	}				_Date	e of site visit	: <u>4/2020</u>	
· ·					-						of training 11/2014 I classes? Y X N	_
NOTE : Form Source o			•				_		-	ed (figures o	can be combined).	
OVERALL WETLA	ND	CAT	EGO	RY	<u>IV</u>	<u></u> (b	ased	on f	uncti	ons <u>X</u> ors	pecial characteristics	_)
1. Category of v	vetl	and	based	d on	FUN	NCTIO	ONS					
	Cate	gory	I – Tot	al sc	ore =	23 –	27					
	Cate	gorv	II – To	tal s	core	= 20 -	- 22				Score for each function based	
											on three	
	_	•	II – To								ratings (order of ratings	
X	_Cat	egory	/ IV – ⁻	Total	scor	e = 9	– 15				is not	
FUNCTION		nprov ter Q	ing uality	H	ydrolo	ogic	ı	Habita	at		important) 9 = H,H,H	
					Circle	the ap	propri	iate ra	tings		8 = H,H,M	
Site Potential	Н	М	L	Н	М	L	Н	М	L		7 = H,H,L	
Landscape Potential	Н	М	<u>L</u>	Н	М	L	Н	М	<u>L</u>	-	7 = H,M,M	
Value	Н	М	L	Н	М	L	Н	М	L	TOTAL	6 = H,M,L	

$\hbox{\bf 2. \ Category based on SPECIAL CHARACTERISTICS of wetland } \\$

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

6 = M,M,M

5 = H,L,L

3 = L,L,L

5 = M,M,L 4 = M,L,L

14

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (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	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (can be added to another figure)	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R 3.1	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	R 3.2, R 3.3	

Lake Fringe Wetlands

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

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	2, 7
Hydroperiods	H 1.2	7
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	7
Plant cover of dense , rigid trees, shrubs, and herbaceous plants	S 4.1	7
(can be added to figure above)		
Boundary of 150 ft buffer (can be added to another figure)	S 2.1, S 5.1	7
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	9
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	10
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	10

HGM Classification of Wetlands in Western Washington

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

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

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

NO – go to 2

YES – the wetland class is **Tidal Fringe** – go to 1.1

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

NO - Saltwater Tidal Fringe (Estuarine)

YES - Freshwater Tidal Fringe

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

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

NO – go to 3

YES – The wetland class is **Flats**

If your wetland can be classified as a Flats wetland, use the form for **Depressional** wetlands.

- 3. Does the entire wetland unit **meet all** of the following criteria?
 - __The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size;
 - At least 30% of the open water area is deeper than 6.6 ft (2 m).

NO – go to 4

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

- 4. Does the entire wetland unit **meet all** of the following criteria?
 - X The wetland is on a slope (*slope can be very gradual*),
 - X The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks,
 - X The water leaves the wetland **without being impounded**.

NO - go to 5

YES - The wetland class is **Slope**

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

- 5. Does the entire wetland unit **meet all** of the following criteria?
 - ___The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river.
 - ___The overbank flooding occurs at least once every 2 years.

NO - go to 6

YES – The wetland class is **Riverine**

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

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

NO - go to 7

YES – The wetland class is **Depressional**

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

NO - go to 8

YES – The wetland class is **Depressional**

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

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

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

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

SLOPE WETLANDS	
Water Quality Functions - Indicators that the site functions to improve water quality	
S 1.0. Does the site have the potential to improve water quality?	
S 1.1. Characteristics of the average slope of the wetland: (a 1% slope has a 1 ft vertical drop in elevation for every 100 ft of horizontal distance)	0
Slope is 1% or less points = 3	
Slope is > 1%-2% points = 2	
Slope is > 2%-5% points = 1	
Slope is greater than 5% points = 0	
S 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions): Yes = 3 No = 0	0
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollutants:	3
Choose the points appropriate for the description that best fits the plants in the wetland. Dense means you	
have trouble seeing the soil surface (>75% cover), and uncut means not grazed or mowed and plants are higher than 6 in.	
Dense, uncut, herbaceous plants > 90% of the wetland area points = 6	
Dense, uncut, herbaceous plants > ½ of area points = 3	
Dense, woody, plants > ½ of area points = 2	
Dense, uncut, herbaceous plants > ¼ of area points = 1	
Does not meet any of the criteria above for plants points = 0	
Total for S 1 Add the points in the boxes above	3

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

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

Rating of Landscape Potential If score is: ___1-2 = M __X __0 = L

Record the rating on the first page

S 3.0. Is the water quality improvement provided by the site valuable to society?	
S 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list? Yes = 1 No = 0	0
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? At least one aquatic resource in the basin is on the $303(d)$ list. Yes = 1 No = 0	1
S 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? <i>Answer YES</i> if there is a TMDL for the basin in which unit is found. Yes = 2 No = 0	2
Total for S 3 Add the points in the boxes above	3

Rating of Value If score is: X 2-4 = H ___1 = M ___0 = L

Record the rating on the first page

SLOPE WETLANDS	
Hydrologic Functions - Indicators that the site functions to reduce flooding and stream erosi	on
S 4.0. Does the site have the potential to reduce flooding and stream erosion?	
S 4.1. Characteristics of plants that reduce the velocity of surface flows during storms: Choose the points appropriate for the description that best fits conditions in the wetland. Stems of plants should be thick enough (usually > 1/8	0
in), or dense enough, to remain erect during surface flows.	
Dense, uncut, rigid plants cover > 90% of the area of the wetland points = 1	
Rating of Site Potential If score is: 1 = M X 0 = I Record the rating on t	he first nage

S 5.0. Does the landscape have the potential to support the hydrologic functions of the site?	
S 5.1. Is more than 25% of the area within 150 ft upslope of wetland in land uses or cover that generate excess	0*
surface runoff? Yes = 1 No = 0]

Rating of Landscape Potential If score is: ___1 = M _X _0 = L

Record the rating on the first page

S 6.0. Are the hydrologic functions provided by the site valuable to society?			
S 6.1. Distance to the nearest areas downstream that have flooding problems: The sub-basin immediately down-gradient of site has flooding problems that result in damage to human or			
natural resources (e.g., houses or salmon redds) points = 2 Surface flooding problems are in a sub-basin farther down-gradient points = 1 No flooding problems anywhere downstream points = 0			
S 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? Yes = 2 No = 0			
Total for S 6 Add the points in the boxes above	2		

Rating of Value If score is: X 2-4 = H ___1 = M ___0 = L

Record the rating on the first page

NOTES and FIELD OBSERVATIONS:

*State Highway 305 is located south of Wetland B just above the culvert crossing. It does not appear that water from the highway drains into Wetland B because the highway lanes slope southerly away from the wetland.

These questions apply to wetlands of all HGM classes.	
HABITAT FUNCTIONS - Indicators that site functions to provide important habitat	
H 1.0. Does the site have the potential to provide habitat?	
H 1.1. Structure of plant community: Indicators are Cowardin classes and strata within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked. Aquatic bedAquatic bedEmergentScrub-shrub (areas where shrubs have > 30% cover)Scrub-shrub (areas where trees have > 30% cover)X Forested (areas where trees have > 30% cover) 1 structure: points = 0	1
X The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon	
H 1.2. Hydroperiods Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ ac to count (see text for descriptions of hydroperiods). ——Permanently flooded or inundated 4 or more types present: points = 3 ——Seasonally flooded or inundated 3 types present: points = 2 ——Occasionally flooded or inundated 2 types present: points = 1 ——X Saturated only 1 type present: points = 0 ——X Permanently flowing stream or river in, or adjacent to, the wetland ——Seasonally flowing stream in, or adjacent to, the wetland ——Lake Fringe wetland 2 points ——Freshwater tidal wetland 2 points	1
H 1.3. Richness of plant species	1
Count the number of plant species in the wetland that cover at least 10 ft ² . Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle If you counted: > 19 species 5 - 19 species points = 1 < 5 species points = 0	
H 1.4. Interspersion of habitats Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. If you have four or more plant classes or three classes and open water, the rating is always high.	0
None = 0 points Low = 1 point Moderate = 2 points	
All three diagrams in this row are HIGH = 3points	

Wedand name of number. <u>D</u>		
H 1.5. Special habitat features:		3
Check the habitat features that are present in the wetland. The number of checks is the number	ber of points.	
X Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).		
Standing snags (dbh > 4 in) within the wetland		
X Undercut banks are present for at least 6.6 ft (2 m) and/or overhanging plants extends	at least 3.3 ft (1 m)	
over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m)		
Stable steep banks of fine material that might be used by beaver or muskrat for denning	g (> 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 ¼ ac of thin-stemmed persistent plants or woody branches are present in areas t	that are	
permanently or seasonally inundated (structures for egg-laying by amphibians)		
X Invasive plants cover less than 25% of the wetland area in every stratum of plants (see I	H 1.1 for list of	
Strata) Total for H 1 Add the points in	the boxes above	6
		-
	Record the rating on	tne first page
H 2.0. Does the landscape have the potential to support the habitat functions of the site?		
H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit).		1
Calculate: % undisturbed habitat $12.9 + [(\% \text{ moderate and low intensity land uses})/2] 3.3 = _$	<u>16.2</u> %	
If total accessible habitat is:		
$> \frac{1}{3}$ (33.3%) of 1 km Polygon	points = 3	
20-33% of 1 km Polygon	points = 2	
10-19% of 1 km Polygon	<u>points = 1</u>	
< 10% of 1 km Polygon	points = 0	
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.		1
Calculate: % undisturbed habitat 21.2 + [(% moderate and low intensity land uses)/2]	9.7 = 30.9 %	
Undisturbed habitat > 50% of Polygon	points = 3	
Undisturbed habitat 10-50% and in 1-3 patches	points = 2	
Undisturbed habitat 10-50% and > 3 patches	points = 1	
Undisturbed habitat < 10% of 1 km Polygon	points = 0	
H 2.3. Land use intensity in 1 km Polygon: If		-2
> 50% of 1 km Polygon is high intensity land use	points = (- 2)	
≤ 50% of 1 km Polygon is high intensity	points = 0	
	the boxes above	<1
Rating of Landscape Potential If score is:4-6 = H1-3 = MX < 1 = L	Record the rating on t	he 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? <i>Choose only</i>	the highest score	
that applies to the wetland being rated.		
Site meets ANY of the following criteria:	points = 2	
— It has 3 or more priority habitats within 100 m (see next page)		
— It provides habitat for Threatened or Endangered species (any plant or animal on the sta	te or rederal lists)	
 It is mapped as a location for an individual WDFW priority species It is a Wetland of High Conservation Value as determined by the Department of Natural I 	Resources	
— It has been categorized as an important habitat site in a local or regional comprehensive		
Shoreline Master Plan, or in a watershed plan	F. 2011) 111 0	
Site has 1 or 2 priority habitats (listed on next page) within 100 m	<u>points = 1</u>	
Site does not meet any of the criteria above	points = 0	
Rating of Value If score is: 2 = H X 1 = M 0 = L	Record the rating on	the first page
_ _		, , , , , ,

WDFW Priority Habitats

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

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

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

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

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS	
Wetland Type	Category
Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.	
SC 1.0. Estuarine wetlands	
Does the wetland meet the following criteria for Estuarine wetlands?	
— The dominant water regime is tidal,	
— Vegetated, and	
— With a salinity greater than 0.5 ppt Yes –Go to SC 1.1 Not an estuarine wetland	
SC 1.1. Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151? Yes = Category I No - Go to SC 1.2	Cat. I
SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?	
 The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less than 10% cover of non-native plant species. (If non-native species are Spartina, see page 25) At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un- 	Cat. I
mowed grassland.	Cat. II
— The wetland has at least two of the following features: tidal channels, depressions with open water, or	Cat. II
contiguous freshwater wetlands. Yes = Category I No = Category II	
SC 2.0. Wetlands of High Conservation Value (WHCV)	
SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High	
Conservation Value? Yes – Go to SC 2.2 No – Go to SC 2.3	Cat. I
SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? Yes = Category I No = Not a WHCV	
SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland?	
http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf	
Yes – Contact WNHP/WDNR and go to SC 2.4 No = Not a WHCV SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on	
their website? Yes = Category I No = Not a WHCV	
SC 3.0. Bogs	
Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key</i>	
below. If you answer YES you will still need to rate the wetland based on its functions.	
SC 3.1. Does an area within the wetland unit have organic soil horizons, either peats or mucks, that compose 16 in or	
more of the first 32 in of the soil profile? Yes – Go to SC 3.3 No – 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 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 = Is not a bog	
SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30%	
cover of plant species listed in Table 4? Yes = Is a Category I bog No - Go to SC 3.4	
NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that criterion by	
measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the	Cat. I
plant species in Table 4 are present, the wetland is a bog.	Cat. I
SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the	
species (or combination of species) listed in Table 4 provide more than 30% of the cover under the canopy?	
Yes = Is a Category I bog No = Is not a bog	
163 – 13 d Category i Mog NO – 15 Hot a Bug	

SC 4.0. Forested Wetlands	
Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i>	
 Old-growth forests (west of Cascade crest): Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at least 200 years of age OR have a diameter at breast height (dbh) of 32 in (81 cm) or more. Mature forests (west of the Cascade Crest): Stands where the largest trees are 80- 200 years old OR the species that make up the canopy have an average diameter (dbh) exceeding 21 in (53 cm). 	
Yes = Category I No = Not a forested wetland for this section	Cat. I
SC 5.0. Wetlands in Coastal Lagoons	
Does the wetland meet all of the following criteria of a wetland in a coastal 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, less frequently, rocks	
 The lagoon in which the wetland is located contains ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (needs to be measured near the bottom) Yes – Go to SC 5.1 No = Not a wetland in a coastal lagoon 	Cat. I
SC 5.1. 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 on p. 100). — At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-	Cat. II
mowed grassland. — The wetland is larger than $^{1}/_{10}$ ac (4350 ft 2) Yes = Category I No = Category II	
SC 6.0. Interdunal Wetlands	
Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? If you answer yes you will still need to rate the wetland based on its habitat functions. In practical terms that means the following geographic areas:	
 Long Beach Peninsula: Lands west of SR 103 Grayland-Westport: Lands west of SR 105 Ocean Shores-Copalis: Lands west of SR 115 and SR 109 Yes – Go to SC 6.1 No = not an interdunal wetland for rating	Cat I
SC 6.1. Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H,H,H or H,H,M for the three aspects of function)? Yes = Category I No – Go to SC 6.2 SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger?	Cat. II
Yes = Category II No – Go to SC 6.3 SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and 1 ac? Yes = Category II No = Category IV	Cat. III Cat. IV
Category of wetland based on Special Characteristics	Cat. IV
If you answered No for all types, enter "Not Applicable" on Summary Form	

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RATING SUMMARY – Western Washington

Name of wetland (or ID	#): _	Wetla	nd (2				_Date	e of site	visit:	4/2020
Rated by J Bartlett			Tr	aine	ed by	Ecolo	gy?_	<u>Х</u> Ү	es	_No Dat	e of	training 11/2014
HGM Class used for	r rat	ing <u></u>	Slope				Wet	land l	nas m	ultiple H	IGM	classes?Y <u>X</u> N
NOTE: Form Source of	f bas	se aer	rial pho	oto/	map _	Go	oogle	Eartl	h h			an be combined).
OVENALL WEILA	110	CAI	LGG			''	Jasec	1 011 1	uncti	0113 <u>X</u>	Oi 3þ	decial characteristics
1. Category of v												
	Category I - Total score = 23 - 27 Score for each											
Category II – Total score = 20 – 22 function based on three								on three				
Category III – Total score = 16 – 19 X Category IV – Total score = 9 – 15 X Category IV – Total score = 9 – 15								ratings (order of ratings				
			<u> </u>							1		is not important)
FUNCTION		-	ving	Н	ydrolo	ogic		Habita	at			important)
	Wa	ter Q	uality		Circle	tha an	nronr	iata ra	tings			9 = H,H,H
Site Potential	Н	М	L	Н	M	<u>L</u>	Н	M	<u>L</u>			8 = H,H,M
Landscape Potential	Н.	<u>M</u>	L	н	M		Н.	M	<u> </u>			7 = H,H,L 7 = H,M,M
Value	<u>H</u>	M	_ <u>=</u>	'' H	M		Н.		<u> </u>	TOTAL]	6 = H,M,L
	п		L	П		L	Г.	<u>M</u>	L			6 = M,M,M
Score Based on Ratings		6			5			4		15		5 = H,L,L 5 = M M L

2. Category based on SPECIAL CHARACTERISTICS of wetland

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

4 = M,L,L 3 = L,L,L

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (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	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (can be added to another figure)	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R 3.1	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	R 3.2, R 3.3	

Lake Fringe Wetlands

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

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	2, 6
Hydroperiods	H 1.2	6
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	6
Plant cover of dense , rigid trees, shrubs, and herbaceous plants	S 4.1	6
(can be added to figure above)		
Boundary of 150 ft buffer (can be added to another figure)	S 2.1, S 5.1	6
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	8
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	10
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	10

HGM Classification of Wetlands in Western Washington

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

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

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

NO – go to 2

YES – the wetland class is **Tidal Fringe** – go to 1.1

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

NO - Saltwater Tidal Fringe (Estuarine)

YES - Freshwater Tidal Fringe

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

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

NO – go to 3

YES – The wetland class is **Flats**

If your wetland can be classified as a Flats wetland, use the form for **Depressional** wetlands.

- 3. Does the entire wetland unit **meet all** of the following criteria?
 - __The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size;
 - At least 30% of the open water area is deeper than 6.6 ft (2 m).

NO – go to 4

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

- 4. Does the entire wetland unit **meet all** of the following criteria?
 - X The wetland is on a slope (*slope can be very gradual*),
 - X The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks,
 - X The water leaves the wetland **without being impounded**.

NO - go to 5

YES - The wetland class is **Slope**

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

- 5. Does the entire wetland unit **meet all** of the following criteria?
 - ___The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river.
 - ___The overbank flooding occurs at least once every 2 years.

NO - go to 6

YES – The wetland class is **Riverine**

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

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

NO - go to 7

YES – The wetland class is **Depressional**

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

NO - go to 8

YES – The wetland class is **Depressional**

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

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

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

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

SLOPE WETLANDS Water Quality Functions - Indicators that the site functions to improve water quality					
S 1.0. Does the site have the potential to improve water quality?					
S 1.1. Characteristics of the average slope of the wetland: (a 1% slope has a 1 ft vertical drop in elevation for every 100 ft of horizontal distance)	0				
Slope is 1% or less points = 3					
Slope is > 1%-2% points = 2					
Slope is > 2%-5% points = 1					
Slope is greater than 5% points = 0					
S 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions): Yes = 3 No = 0					
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollutants: Choose the points appropriate for the description that best fits the plants in the wetland. Dense means you have trouble seeing the soil surface (>75% cover), and uncut means not grazed or mowed and plants are higher					
than 6 in.					
Dense, uncut, herbaceous plants > 90% of the wetland area points = 6 Dense, uncut, herbaceous plants > ½ of area points = 3					
Dense, woody, plants > ½ of area points = 2					
Dense, uncut, herbaceous plants > ¼ of area points = 1					
Does not meet any of the criteria above for plants points = 0					
Total for S 1 Add the points in the boxes above	2				

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

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

Rating of Landscape Potential If score is: X 1-2 = M ___0 = L

Record the rating on the first page

S 3.0. Is the water quality improvement provided by the site valuable to society?	
S 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list? Yes = 1 No = 0	0
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? At least one aquatic resource in the basin is on the $303(d)$ list. Yes = 1 No = 0	1
S 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? <i>Answer YES</i> if there is a TMDL for the basin in which unit is found. Yes = 2 No = 0	2
Total for S 3 Add the points in the boxes above	3

Rating of Value If score is: X 2-4 = H ___1 = M ___0 = L

Record the rating on the first page

SLOPE WETLANDS				
Hydrologic Functions - Indicators that the site functions to reduce flooding and stream erosion				
S 4.0. Does the site have the potential to reduce flooding and stream erosion?				
S 4.1. Characteristics of plants that reduce the velocity of surface flows during storms: Choose the points appropriate for the description that best fits conditions in the wetland. Stems of plants should be thick enough (usually > 1/8)	0			
in), or dense enough, to remain erect during surface flows.				
Dense, uncut, rigid plants cover > 90% of the area of the wetland points = 1				
Rating of Site Potential If score is: 1 = M X 0 = L Record the rating on	the first page			

S 5.0. Does the landscape have the potential to support the hydrologic functions of the site?	
S 5.1. Is more than 25% of the area within 150 ft upslope of wetland in land uses or cover that generate excess surface runoff? Yes = 1 No = 0	0*
Surface fulfort:	

Rating of Landscape Potential If score is: ___1 = M __X __0 = L

Record the rating on the first page

S 6.0. Are the hydrologic functions provided by the site valuable to society?				
S 6.1. Distance to the nearest areas downstream that have flooding problems: The sub-basin immediately down-gradient of site has flooding problems that result in damage to human or				
natural resources (e.g., houses or salmon redds) Surface flooding problems are in a sub-basin farther down-gradient No flooding problems anywhere downstream points = 0				
S 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? Yes = 2 No = 0				
Total for S 6 Add the points in the boxes above	2			

Rating of Value If score is: X 2-4 = H ___1 = M ___0 = L

Record the rating on the first page

NOTES and FIELD OBSERVATIONS:

*Bond Road (SR 307) is located east of Wetland C. The road is downslope of Wetland C and there is a roadside ditch along the road that prevents runoff from entering the lower limits of the wetland.

These questions apply to wetlands of all HGM classes. **HABITAT FUNCTIONS** - Indicators that site functions to provide important habitat H 1.0. Does the site have the potential to provide habitat? 2 H 1.1. Structure of plant community: Indicators are Cowardin classes and strata within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked. Aquatic bed 4 structures or more: points = 4 Emergent 3 structures: points = 2 X Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1 X Forested (areas where trees have > 30% cover) 1 structure: points = 0 If the unit has a Forested class, check if: X The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon 0 H 1.2. Hydroperiods Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ ac to count (see text for descriptions of hydroperiods). Permanently flooded or inundated 4 or more types present: points = 3 Seasonally flooded or inundated 3 types present: points = 2 Occasionally flooded or inundated 2 types present: points = 1 X Saturated only 1 type present: points = 0 Permanently flowing stream or river in, or adjacent to, the wetland Seasonally flowing stream in, or adjacent to, the wetland Lake Fringe wetland 2 points Freshwater tidal wetland 2 points H 1.3. Richness of plant species 1 Count the number of plant species in the wetland that cover at least 10 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle If you counted: > 19 species points = 2 5 - 19 species points = 1 < 5 species points = 0 1 H 1.4. Interspersion of habitats Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. If you have four or more plant classes or three classes and open water, the rating is always high. None = 0 points Low = 1 point Moderate = 2 points All three diagrams in this row are HIGH = 3points

H 1.5. Special habitat features:		2
Check the habitat features that are present in the wetland. The number of c	hecks is the number of points.	
X Large, downed, woody debris within the wetland (> 4 in diameter and	6 ft long).	
X Standing snags (dbh > 4 in) within the wetland		
Undercut banks are present for at least 6.6 ft (2 m) and/or overhanging over a stream (or ditch) in, or contiguous with the wetland, for at least		
Stable steep banks of fine material that might be used by beaver or mu	skrat for denning (> 30 degree	
slope) OR signs of recent beaver activity are present (cut shrubs or tre- where wood is exposed)		
At least ¼ ac of thin-stemmed persistent plants or woody branches are	present in areas that are	
permanently or seasonally inundated (structures for egg-laying by am	phibians)	
Invasive plants cover less than 25% of the wetland area in every strature	m of plants (see H 1.1 for list of	
strata)		
Total for H 1	Add the points in the boxes above	6
Rating of Site Potential If score is:15-18 = H7-14 = MX0-6 = L	Record the rating on	the first page
H 2.0. Does the landscape have the potential to support the habitat function	ons of the site?	
H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit).		1
Calculate: % undisturbed habitat <u>9.7</u> + [(% moderate and low intensity la	and uses)/2] 2.8 = 12.5 %	
If total accessible habitat is:	11d d3c3//2 <u> 2:0</u> = <u>12:3</u> /0	
$> \frac{1}{3}$ (33.3%) of 1 km Polygon	points = 3	
20-33% of 1 km Polygon	points = 3	
10-19% of 1 km Polygon		
· -	<u>points = 1</u>	
< 10% of 1 km Polygon	points = 0	1
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.	land	1
Calculate: % undisturbed habitat 21.5+ [(% moderate and low intensity	·	
Undisturbed habitat > 50% of Polygon	points = 3	
Undisturbed habitat 10-50% and in 1-3 patches	points = 2	
Undisturbed habitat 10-50% and > 3 patches	<u>points = 1</u>	
Undisturbed habitat < 10% of 1 km Polygon	points = 0	2
H 2.3. Land use intensity in 1 km Polygon: If		-2
> 50% of 1 km Polygon is high intensity land use	points = (- 2)	
≤ 50% of 1 km Polygon is high intensity	points = 0	
	Add the points in the boxes above	<1
Rating of Landscape Potential If score is:4-6 = H1-3 = MX< 1 = L	Record the rating on t	he 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 polic	ies? Choose only the highest score	
that applies to the wetland being rated.	nest enouse only the highest score	
Site meets ANY of the following criteria:	points = 2	
 It has 3 or more priority habitats within 100 m (see next page) 		
 It provides habitat for Threatened or Endangered species (any plant or Endangered Species (any plant or Endangered Species) 	animal on the state or federal lists)	
 It is a Wetland of High Conservation Value as determined by the Depart 		
 It has been categorized as an important habitat site in a local or regions 	al comprehensive plan, in a	
Shoreline Master Plan, or in a watershed plan	and the second	
Site has 1 or 2 priority habitats (listed on next page) within 100 m	<u>points = 1</u>	
Site does not meet any of the criteria above	points = 0	
Rating of Value If score is: 2 = H X 1 = M 0 = L	Record the rating on	the first page

WDFW Priority Habitats

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

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

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

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

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS	
Wetland Type	Category
Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.	
SC 1.0. Estuarine wetlands	
Does the wetland meet the following criteria for Estuarine wetlands?	
— The dominant water regime is tidal,	
— Vegetated, and	
— With a salinity greater than 0.5 ppt Yes –Go to SC 1.1 Not an estuarine wetland	
SC 1.1. Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area	
Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151	Cat. I
Yes = Category I No - Go to SC 1.2	Cat. I
SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?	
— The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less	Cat. I
than 10% cover of non-native plant species. (If non-native species are Spartina, see page 25)	Cat. I
— At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-	
mowed grassland.	Cat. II
— The wetland has at least two of the following features: tidal channels, depressions with open water, or	
contiguous freshwater wetlands. Yes = Category I No = Category II	
SC 2.0. Wetlands of High Conservation Value (WHCV)	
SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High	
Conservation Value? Yes – Go to SC 2.2 No – Go to SC 2.3	Cat. I
SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?	
Yes = Category I No = Not a WHCV	
SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf	
Yes – Contact WNHP/WDNR and go to SC 2.4 No = Not a WHCV	
SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on	
their website? Yes = Category I No = Not a WHCV	
SC 3.0. Bogs	
Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? Use the ke	?y
below. If you answer YES you will still need to rate the wetland based on its functions.	
SC 3.1. Does an area within the wetland unit have organic soil horizons, either peats or mucks, that compose 16 in or	
more of the first 32 in of the soil profile? Yes – Go to SC 3.3 No – 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 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 = Is not a bog	
SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30%	
cover of plant species listed in Table 4? Yes = Is a Category I bog No – Go to SC 3.4	
NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that criterion be	
measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the	ne
plant species in Table 4 are present, the wetland is a bog.	Cat. I
SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, western red cedar,	
western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the	
species (or combination of species) listed in Table 4 provide more than 30% of the cover under the canopy?	1
Yes = Is a Category I bog No = Is not a bog	

SC 4.0. Forested Wetlands	
Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i>	
 Old-growth forests (west of Cascade crest): Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at least 200 years of age OR have a diameter at breast height (dbh) of 32 in (81 cm) or more. Mature forests (west of the Cascade Crest): Stands where the largest trees are 80- 200 years old OR the 	
species that make up the canopy have an average diameter (dbh) exceeding 21 in (53 cm). Yes = Category I No = Not a forested wetland for this section	Cat. I
 SC 5.0. Wetlands in Coastal Lagoons Does the wetland meet all of the following criteria of a wetland in a coastal 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, less frequently, rocks — The lagoon in which the wetland is located contains ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (needs to be measured near the bottom) Yes – Go to SC 5.1 No = Not a wetland in a coastal lagoon 	Cat. I
 SC 5.1. 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 on p. 100). At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland. The wetland is larger than ¹/10 ac (4350 ft²) 	Cat. II
— The wetland is larger than 7 10 ac (4350 ft) Yes = Category I No = Category II	
SC 6.0. Interdunal Wetlands	
Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? If you answer yes you will still need to rate the wetland based on its habitat functions. In practical terms that means the following geographic areas:	
 Long Beach Peninsula: Lands west of SR 103 Grayland-Westport: Lands west of SR 105 Ocean Shores-Copalis: Lands west of SR 115 and SR 109 Yes – Go to SC 6.1 No = not an interdunal wetland for rating 	Cat I
SC 6.1. Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H,H,H or H,H,M for the three aspects of function)? Yes = Category I No – Go to SC 6.2 SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger?	Cat. II
Yes = Category II No – Go to SC 6.3 SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and 1 ac? Yes = Category III No = Category IV	Cat. III Cat. IV
	Cat. IV
Category of wetland based on Special Characteristics	
If you answered No for all types, enter "Not Applicable" on Summary Form	

Wetland name or number: <u>C</u>

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Mailing Address: 600 Capitol Way North, Olympia, WA 98501-1091 • (360) 902-2200 • TDD (360) 902-2207

Main Office Location: Natural Resources Building, 1111 Washington Street SE, Olympia, WA

Friday, June 05, 2020

Poulsbo Planning & Economic Development 200 NE Moe Street Poulsbo, WA 98370

SUBJECT: Stream Typing; Oslo Bay Apartments, Kitsap Parcels 102601-4-028-2003, 102601-4-027-2004, 112601-3-044-2004, and 102601-4-022-2009.

Mrs. Boughton,

On June 3rd, 2020 I met with Marla Powers and Michael Bateman of City of Poulsbo, Alison O'Sullivan with the Suquamish Tribe; as well as consultants Joanne Bartlett, Robbyn Myers, Berni Kenworthy, and Chad Wallin on site to determine the stream type of the unnamed tributary to Dogfish Creek on the subject parcels. During this site review we identified the initiation of stream to be approximately 15 ft south/downstream of a stormwater outfall and rock rip rap scour pad coming from the Kitsap Transit Center to the north. At this location (47.758795, -122.649871), the Type N stream begins and continues to run south through the subject parcels to the location of the type break (47.75699, -122.64948) where the stream begins to exhibit Type F characteristics. Please see figure below.



This stream typing determination was based on observed physical characteristics of the stream such as presence of sorted sediment and scoured banks, as well as determinations made during previous site inspections by WDFW personnel in August 2001 (attached letter by Jeff Davis), May 2011(attached email by Gina Piazza), and January 2018 (attached WDFW Fish Passage and Diversion Screening Inventory Database Site Description Report for Site 934421).

Note should be taken that although the Type N segment of this stream exhibits bankful widths greater than 2 ft the type break determinations were made using observations from those previous site inspections referenced above as it appears that site conditions have changed since those inspections.

It is evident in the site conditions that upstream development has resulted in additional stormwater and hydrology in this stream causing increase scour, sediment sorting, exaggeration of stream characteristics, and development of wetland conditions along this stream. It can be assumed that this condition will continue to increase in the future due to changing hydroperiods and flashier flows associated with climate change. Thus, this letter provides a snapshot in time of the current stream conditions that will likely change in the future.

Thank you for considering these comments in your review. Please contact me at (360) 522-6035 to discuss any questions you might have.

Sincerely,

Nam Siu

Area Habitat Biologist

Washington Department of Fish and Wildlife

Nam.Siu@dfw.wa.gov

State of Washington DEPARTMENT OF FISH AND WILDLIFE

RECEIVED
AUG 2 9 2001
MAP, LTD.

Region 6 Office: 48 Devonshire Road - Montesano, Washington 98563-9618 - (360) 249-4628

August 23, 2001

Kitsap County DCD ATTENTION: Rick Kimball 614 Division Street, MS-36 Port Orchard, WA 98366

Dear Mr. Kimball:

SUBJECT: Stream Verification; Kitsap County North Maintenance Yard Relocation

Proponent, Section 10, Township 26 North, Range 01 East, Kitsap County,

WRIA 15.MISC

On August 22, 2001 I met with Mark Ises of MAP Ltd. And the project proponents to review the drainage to the east and determine if a Type NS stream was present on the subject property. After further review, the initiation point for the Type NS stream is offsite to the south of the subject property.

However, within the drainage on the subject property there was the presence of heaving roots found on the mature conifer and alder. Heaving roots can be an indicator of the presence of wetland conditions. Obligate plants were not present within the bottom of this drainage and soil pits were not excavated during this site visit. However, prior to the proposed re-contour of the ravine, soil pits should be excavated to establish whether or not this ravine is a wetland area.

Thank you for the opportunity to provide these comments. If you have any questions, please contact me at (360) 895-3965.

Sincerely,

Jeff Davis

Area Habitat Biologist

JD:jd

cc: Rich Brooks, Suguamish Tribe

Mark Ises, MAP Ltd., P.O. Box 720, Silverdale, WA 98383

Siu, Nam (DFW)

From: Piazza, Gina L (DFW) < Gina.Piazza@dfw.wa.gov>

Sent: Wednesday, June 1, 2011 9:49 AM bberezowsky@cityofpoulsbo.com

Cc: Alison Osullivan

Subject: MDNS 04-07-11-1, Rose Master Plan

Dear Ms. Berezowsky,

The Washington Department of Fish and Wildlife (WDFW) received your request for review and response of the above noted proposal and offers the following comments at this time. Additional comments may be offered as project review progresses.

- The unnamed stream up to the point where it goes subsurface meets the type 3 definition, which includes seasonal streams. The C3 report dated 05/4/2011 and the BGE Environmental report dated May 13, 2011 describe the stream as not meeting type 3 criteria based on the fact that the stream is likely seasonal. According to the DNR definitions which can be found here:

 http://www.dnr.wa.gov/BusinessPermits/Topics/ForestPracticesApplications/Pages/fp_watertyping.aspx_"Fish streams may or may not have flowing water all year; they may be perennial or seasonal." The channel is more than 2 feet wide (also mentioned in the Wiltermood Dec 2010 report) and less than 16% gradient, which are the physical criteria for a type 3 stream. It does not meet the type 4 definition, as that is for perennial non-fish habitat. When it sheet flows without a defined bed, it is not jurisdictional for me (but probably still wetland). WDFW recommends maintaining buffers as appropriate for the above stream. An HPA may be required for any changes to the above stream or dogfish, and mitigation will also be required for impacts to resources described above.
- This project area includes a portion of dogfish creek which has two documented ESA listed species, as well as, several additional fish species and wetlands. WDFW recommends that all activity is limited to outside the buffers set for type "F" streams and wetlands. Riparian trees and vegetation provide several benefits to fish and wildlife that are found in and around streams. These benefits include but are not limited to food production, shading, filtration of storm water pollutants, bank protection from erosion and large woody debris for fish habitat and stream channel stability. The wetlands provide water quality improvements, food and habitat for fish and wildlife, flood control, and shoreline erosion control. They also act as sources of food and provide cover from predators, of which most species of freshwater fish are dependent on for these functions.
- WDFW recommends that Low Impact Development (LID) techniques are implemented to remove and reduce impacts from runoff to receiving waters. The loss of permeable surfaces to an impervious surface will contribute to sedimentation and storm water impacts. Changes in turbidity, flow, temperature and other factors from storm water can impact the suitability of shoreline habitat for salmonids and other aquatic plants and animals. LID reduces impacts on watershed hydrology and aquatic resources by mimicking pre-development peak flow and flow duration conditions. LID includes, but is not limited to minimization of total impervious area, rooftop runoff collection, bio retention swales(rain gardens), compost amended soils, retention of native vegetation (minimizing clearing and grading), maintaining natural drainages, replacing curb and gutter with swales along roadways, and use of permeable pavers.
- A Hydraulic Project Approval (HPA; RCW 77.55.021, WAC 220-110) administered by WDFW is required prior to the performance of construction activities that may divert or change the bed or flow of waters of the state.

Thank you for the opportunity to provide these comments. If you have any questions you may contact me at (360) 895-3965 or gina.piazza@dfw.wa.gov.

Gina Piazza Area Habitat Biologist Washington Dept. Fish and Wildlife 450 Port Orchard Blvd, Suite 290 Port Orchard, WA 98366

Phone: 360 895 3965 Fax: 360 876 1894



Fish Passage & Diversion Screening Inventory Database Report Cover Sheet

The following report is extracted from the Washington Department of Fish and Wildlife's (WDFW) Fish Passage and Diversion Screening Inventory Database (FPDSI). WDFW makes every attempt to keep these reports in sync with FPDSI; however, the dynamic nature of the data and workflows associated with maintaining the database may result in short-term differences.

Users are encouraged to contact WDFW to discuss appropriate use of the data and how we can assist with fish passage barrier removal or inventory. Please visit the Fish Passage web site for contact information at: https://wdfw.wa.gov/species-habitats/habitat-recovery/fish-passage/about

Disclaimers:

- Data presented here represent a snapshot observation of conditions in a dynamic environment that is subject to change. Fish passage data are also collected from a variety of agencies and sources. Therefore, WDFW makes no guarantee concerning the data's content, accuracy, completeness, or the results obtained from use of the data. WDFW assumes no liability for the data represented here.
- These data are not an attempt to provide you with an official agency response as to the impacts of your project on fish and wildlife.
- Note that some fish passage features, habitats or species may occur in areas not currently
 known to the WDFW Fish Passage division, and may not be reflected in this database. A lack of
 data does not necessarily indicate that a feature, habitat, or species are not present.
- Unauthorized attempts to alter or modify these data are strictly prohibited.
- Bankfull width measurements included in these reports should not be used for fish passage crossing design. They are solely for assessment purposes.
- The barrier status reported in this document is based on the swimming abilities of adult salmonids. Passabilities are a qualitative value, and should not be interpreted as a quantitative calculation. Please see page 1-4 of the Fish Passage Inventory, Assessment and Prioritization Manual for further clarification: https://wdfw.wa.gov/publications/02061
- EXIF data presented with Image Reports may be erroneous due to camera battery failures and resetting of camera clock functions.

Abbreviations:

Most abbreviations in this report are defined in the Quick Reference Tables of the Fish Passage Inventory, Assessment, and Prioritization Manual. Additional commonly used abbreviations are defined as follows:

NFB = no potential salmonid use, **BB** = both banks, **LB** = left bank looking downstream, **RB** = right bank looking downstream, **US** or **U/S** = upstream, **DS** or **D/S** = downstream, **WSDrop** = water surface drop, **BFW** = bankfull width, **OHW** = ordinary high water, **SLW** = scour line width, **CMP** = corrugated metal pipe, **Q**_{fp} = fish passage flow, **V&D** = Velocity and Depth, **ROW** = Right of Way

The FPDSI database often uses default values such as '-99.99' or '-999' to represent null values.

WDFW Fish Passage and Diversion Screening Inventory Database

Site Description Report

Site ID 934421			Р	roject CITY		
Geographic Coordinate	es	Waterbody				
Latitude (WGS 84):	47.758795	Stream:		unnamed		
Longitude (WGS 84):	-122.649871	Tributary T	Го:	Dogfish Cr		
East (HARN 83):	1,111,607.3	WRIA:		15.0000		
North (HARN 83)	891,773.3	River Mile:		-999.99		
		Fish Use F	Potential	: No		
General Location		FUP Criter	ria:	Physical		
Road Name: park	n ride; Vetter Rd	Owner				
Mile Post:	-999.99	Type: C	ity			
County:	Kitsap		ity of Po	pulsbo		
WDFW Region:	6					
PI Species						
☐ Sockeye	☐ Chinook		□ Sea l	Run Cutthroat		
☐ Pink	☐ Coho	☐ Resident Trout				
☐ Chum	☐ Steelhea	d [☐ Bull Trout			
Associated Features						
✓ Culvert	☐ Dam	☐ Natural Barri	ier	Diversion		
☐ Non-Culvert Xing	☐ Other	\square Fishway				
Location/Directions						
Site Comments						
Culvert is being fed from two detention ponds connected by standpipes and other culverts (between the two ponds). Stream channel completely loses scour just below culvert making culvert NFB.						

Print Date: 4/22/2019

These data represent a snapshot of the Washington Department of Fish and Wildlife's current records. Due to the ongoing nature of assessment and inventory of these features, these data may not accurately represent conditions on the ground, and are subject to change.

WDFW Fish Passage and Diversion Screening Inventory Database

Level A Culvert Assessment Report

		Lev	ei A Cu	IVEIL AS	3633111	ent iveb	JIL			
Site ID: 9344		01					NA/DIA		45.000	
	58795	Strea		innamed			WRIA:		15.0000	
Longitude: -122.	649871	I ribu	tary To: C	ogfish Ci	<u> </u>		Fish Us	e Potential:	No	
Data Source				WDFW						
Fi	eld Crew:	Fredley;Hold	owatz		i	Review Date	e: 1/10/2	018		
	C	ulvert Detai	ls —			-	Lev	el A Paramet	ers —	-
ID Shape M	aterial Spa	<u>n Rise</u>	<u>Length</u>	<u>WDIC</u>	<u>Apron</u>	WSDrop	Location	Countersunk	<u>Backwater</u>	Slope (%)
1.1 RND	PVC 0.6		-999.90	-99.99		-99.99		Unknown		-99.99
All dimensions in	meters									
						Mary designation of the second	962 (2062)	R J. St. Jake		
Channel Descri	ption —					2				
Toe Width (m):								States against against		
Average Width ((m):	-99.99								
Culvert/Stream \	Width Ratio:	-99.99								
Plunge Pool —										
Length (m):		-999.99								
Max Depth (m):		-99.99				1 2 h				
OHW Width (m)	:	-999.99				100				
Road -										
Fill Depth (m):		-999.90								
A							1 0]
Assessment Res		Passabi	::: (0/)-	NI//	\	Mathadi		NI/A		
	N/A		Present:	N/A		Method: Recheck		N/A		
iteason.	IN/A	1 ISHWay	r resent.	140	<u>'</u>	recheck				
Comments										
]
Potential Habitat	Gain									
Survey Type:			Spawnin	g (sq m):			L	ength (m):		

PI Total

Print Date: 4/22/2019

Significant Reach:

N/A

Rearing (sq m):