Spathe and Spadix Wetland Services and Environmental Consulting LLC
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Wetland Site Assessment

Bakerview Rd

Oak Harbor, WA

Parcel ID: R23432-305-0470

Client: Brian Johnson
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1. Introduction

At the request of Brian Johnson, Spathe and Spadix Wetland Services and Environmental Consulting LLC (S&S) conducted a wetland site assessment evaluating the presence and location of wetlands on and within 300 feet of parcel R23432-305-0470 (the subject parcel). The subject parcel is located on Bakerview Rd in Oak Harbor, Washington. This assessment includes a qualitative wetlands evaluation and delineation of the area within 300 feet of the 2.87-acre parcel. This report includes a description of current site conditions, an assessment of the wetlands onsite, and regulatory analysis including a Type I Reasonable Use Determination.

Photo 1: View to the north and interior northern portion of the subject parcel.

2. Site Description

The subject property is located within Section 32, Township 34N, Range 02E in Island County, Washington. It is accessed from Bakerview Road which is adjacent to the southern property boundary. The 2.87-acre subject parcel is somewhat rectangular, with an estimated average 12% declination to the north. Elevations for the proposed development area are approximately 130 feet above mean sea level. The subject parcel is mostly undeveloped with some clearing, primarily of invasive *Rubus discolor* (Himalayan blackberry), occurring recently in the upper portion of the parcel.

A review of the 1985 aerial photograph from the Island County GeoMap Application (IC GeoMap) indicates the subject parcel was undeveloped at that time. The surrounding land uses appear to primarily consist of undeveloped areas, single-family homes, and agricultural use areas with

associated outbuildings. This remains consistent in more recent aerial images, including the 2020 aerial image, which is the most recent available on IC GeoMap.
According to Island County's online zoning map, the subject parcel is zoned as Rural. Island County Code (ICC) 17.03.035.B indicates residential development is a Type 1 Permitted Use within areas with the Rural zoning designation. The parcel appears to be bordered on all sides by single-family homes, undeveloped land, agricultural use areas, and associated outbuildings.

The subject parcel was visited on March 5 and 7, 2024 and vegetation was observed. The subject parcel is vegetated primarily with native and naturalized vegetation with invasive vegetation found throughout, primarily in the upland areas. The invasive species observed include *Rubus discolor* (Himalayan blackberry) and *Ilex aquifolium* (English holly). The vegetation on the subject parcel consists of tree, sapling/shrub, and herb stratums. The tree stratum primarily consists of *Alnus rubra* (red alder), *Picea sitchensis* (Sitka spruce), *Sambucus racemosa* (red elderberry), and *Acer macrophyllum* (bigleaf maple) in the wetland and wetland fringe areas and *Tsuga heterophylla* (western hemlock) and *Pseudotsuga menziesii* (Douglas fir) in the upland portion of the subject parcel. English holly was also observed onsite. The sapling/shrub stratum primarily consists of *Rubus spectabilis* (salmonberry), *Oemleria cerasiformis* (oso berry), and Himalayan blackberry, with *Vaccinium parvifolium* (red huckleberry) also observed onsite. The herb stratum primarily consists of *Equisetum arvense* (field horsetail) and *Ranunculus repens* (creeping buttercup) in the wetland and wetland fringe areas with *Polystichum munitum* (western sword fern) and *Tolmiea menziesii* (piggyback plant) also observed onsite.

Site observations during the growing season and LiDAR imagery indicate ponding in depressed areas on the subject parcel. There are also several ditch/streams running through the subject parcel, which converge and flow to the north. The contributing basin for the parcel is moderate to large in size. The surrounding developed areas appear to manage stormwater runoff. The source of water to the site appears to primarily consist of ground water, surface water runoff to the ditches/streams onsite, and direct precipitation.

3. Project Description

It is our understanding that the owner of the subject parcel, Brian Johnson, is planning to build a single-family residence and shop on the subject parcel. The location of the proposed development area, wetland, and associated buffers are indicated on the Wetland Areas Site Plan included in Attachment 1.

4. Information Sources

The subject parcel has been assessed under several existing studies. These information sources have been reviewed and synthesized to assist S&S in characterizing the subject property. The information sources reviewed are summarized as follows:

<u>National Wetlands Inventory</u>

The National Wetlands Inventory (NWI) is compiled by the United States Fish & Wildlife Service (USFWS). The NWI relies on visual aerial photograph interpretation of wetland indicators including hydrologic, vegetative, and topographic signatures. Wetland areas identified under the NWI are also classified in accordance with the Cowardin et. al. (1979) classification system which characterizes wetlands, in part, through hydrologic regime, vegetation type, and location within the landscape.

The current NWI map indicates the presence of two wetland complexes that encroach onto the subject parcel. The first wetland complex is mapped as a 1.97-acre freshwater forested/shrub wetland that is classified as a PSSC wetland. The PSSC designation refers to a palustrine (P), scrub-shrub (SS), and seasonally flooded (C) wetland. The other wetland complex is mapped as a 19.41-acre freshwater emergent wetland that is classified as a PEM1C. The PEM1C designation refers to a palustrine, emergent (EM), persistent (1), and seasonally flooded wetland (Image 1).

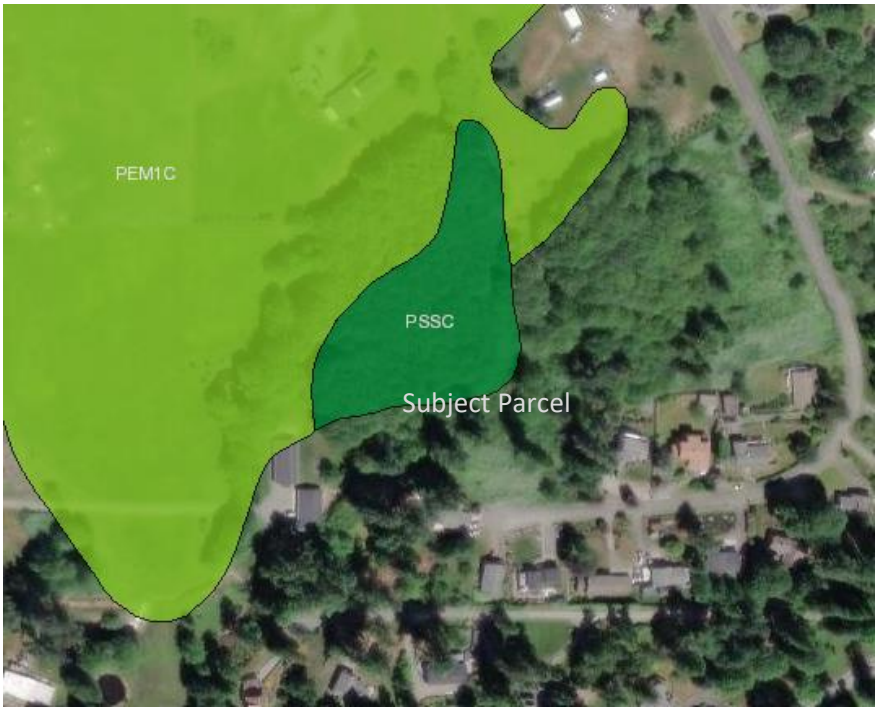

Image 1: NWI image of the subject parcel.

S&S utilizes the NWI map only as a generalized indication of the possible presence and extent of wetlands. Identification of wetlands in an assessment or delineation of wetland boundaries is always a site-specific analysis.

Island County GeoMap Application

The Island County GeoMap Application (IC GeoMap) was reviewed to assess the presence of Island County wetlands, NWI wetlands, regulatory and cartographic streams, lakes, ponds, habitats of local importance, culverts, and shorelines on and within 300 feet of the subject parcel.

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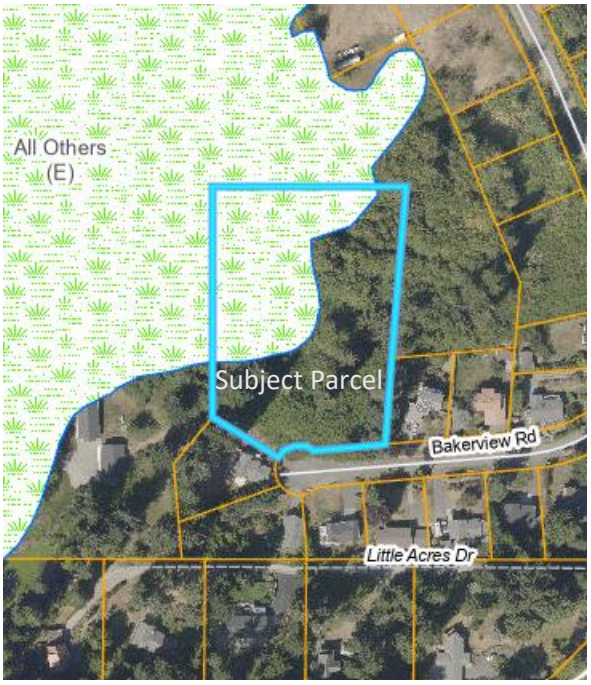


Image 2: IC GeoMap image of the subject parcel – Island County Wetlands and NWI layers

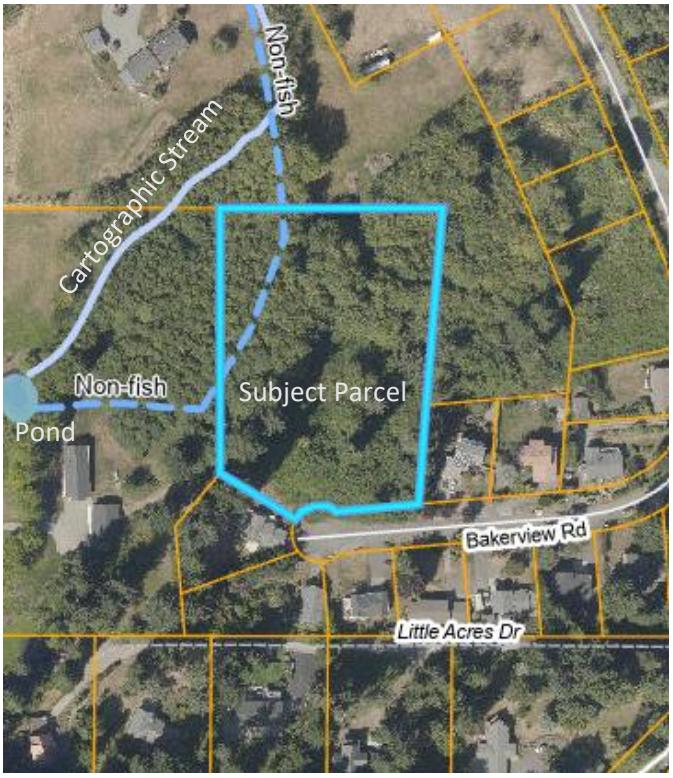


Image 3: IC Geomap image of the subject parcel – Island County Streams and Lakes/ponds layers

Island County wetlands are mapped based on multiple sources including the NWI and previously delineated wetlands. One Type E Wetland was indicated on and in the vicinity of the subject parcel (Image 2). The Type E wetland appears to overlay the NWI mapped wetlands (Images 1 and 2). One Non-Fish regulatory stream is mapped on and in the immediate vicinity of the subject parcel, and a cartographic stream and pond are mapped within 300 feet of the subject parcel (Image 3). Lakes, habitats of local importance, culverts, and shorelines were not indicated on or within 300 feet of the subject parcel.

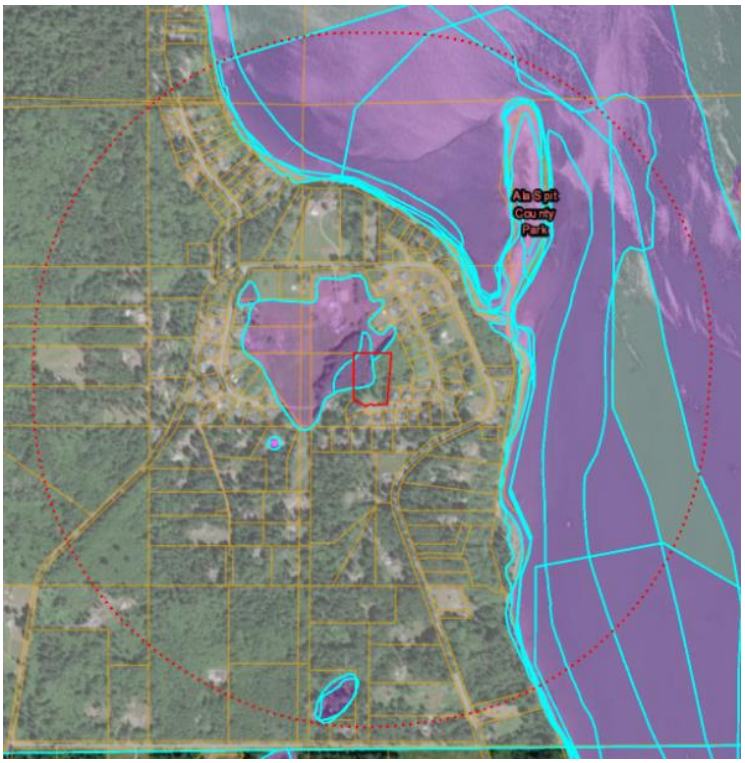
S&S utilizes IC GeoMap only as a generalized indication of the possible presence and extent of wetlands, habitat, and other relevant information. Identification of wetlands, habitat, or other relevant features in an assessment or delineation of wetland boundaries is always a site-specific analysis.

Washington Department of Fish & Wildlife Priority Habitats and Species Map

The Washington Department of Fish and Wildlife (WDFW) Priority Habitats and Species (PHS) map was reviewed to identify the presence of state and federally listed species and biodiversity corridors on and within a half mile of the subject parcel. These species are identified as priority species under WDFW's Priority Habitat and Species Program. Priority species require protective measures for their survival due to their population status, sensitivity to habitat alteration, and/or recreational, commercial, or tribal importance.

The area on and within 300 feet of the subject parcel is a sensitive location for *Eptesicus fuscus* (big brown bat) and *Myotis lucifugus* (little brown bat). Freshwater emergent wetland and freshwater forested/shrub wetland habitat also occurs in this area. This area does not have any occurrences of species listed Federally or in Washington State.

Beyond 300 feet, the area within a half-mile radius of the subject parcel is not a sensitive location for any species or habitats. The PHS map does indicate an occurrence of *Anaxyrus Boreas* (western toad), which is given an undefined Federal status and a Candidate State status, and an occurrence of *Clupea pallasi* (Pacific Herring – Georgia Basin Distinct Population Segment) that is listed as a Candidate species in Washington State. Unlisted species that occur in this area include *Hypomesus pretiosus* (surf smelt), *Ammodytes hexapterus* (Pacific sand lance), hard-shell clam species, pandalid shrimp species, *Cancer magister* (Dungeness crab), and shorebird concentrations. The PHS Map also indicates several occurrences of habitat types, including wetlands, estuarine and marine wetland, and additional occurrences of freshwater forested/shrub wetland (Image 4).



PHS Species/Habitats Overview:

Occurence Name	Federal Status	State Status	Sensitive Location
Western toad	undefined	Candidate	No
Surf Smelt	N/A	N/A	No
Pacific Sand Lance	N/A	N/A	No
Hardshell Clam	N/A	N/A	No
Pandalid Shrimp	N/A	N/A	No
Dungeness crab	N/A	N/A	No
Pacific Herring (Georgia Basin DPS)	N/A	Candidate	No
Wetlands	N/A	N/A	No
Shorebird Concentrations	N/A	N/A	No
Estuarine and Marine Wetland	N/A	N/A	No
Freshwater Emergent Wetland	N/A	N/A	No
Freshwater Forested/Shrub Wetland	N/A	N/A	No
Big brown bat	N/A	N/A	Yes
Little Brown Bat	N/A	N/A	Yes

Image 4: PHS map and overview for a half-mile radius around the subject parcel.

The subject parcel is listed as a sensitive location for big brown bat and little brown bat. They are among more than 15 species of bats that live in Washington. Bats eat vast quantities of night-flying insects including moths, beetles, mosquitoes, termites, and flies. Through habitat alteration,

commercial pesticide use, and control practices humans are a main source of mortality among bats. Because of the dependence of this species on aquatic habitats and associated insects for food, it is important to avoid human activities that reduce water quality, including destroying or degrading wetlands, ponds, streams, lakes, and their associated buffer habitats. Protection of large trees along waterbodies should be maintained to provide potential roost sites.

The western toad occurs within 1,000 feet of the subject parcel and is listed as a Candidate species in Washington State. Its Federal status is undefined. Pursuant to ICC 17.02B.210 – Western Toad, *Western Toad breeding sites and upland occurrences are designated as fish and wildlife habitat conservation areas. Occurrences must be documented by scientifically verifiable data from WDFW, Priority Habitat and Species data from WDFW, a qualified professional, be identified through the processing of site-specific land use and development permits, or other scientifically verifiable data. Breeding sites that occur within regulated wetlands, streams, and their buffers shall be protected through Island County's wetland, stream, and buffer regulations. All other occurrences shall be protected through the evaluation and protection requirements in 17.02B.400.* While a Biological Site Assessment is out of the scope of this report, it may be deemed necessary if so determined by Island County Planning and Community Development.

The WDFW western toad webpage describes the western toad as a medium to large-sized (2-5 inches in length) toad with a blunt head, stout body, broad waist, short legs, and warty skin. They lay their eggs in long strings on bare sediments or intertwined vegetation in shallow water near the shore. Breeding waters are in still waters of usually permanent waters, including wetlands, ponds, and lakes or in slowly moving sections of rivers. They can exude a poisonous substance from their skin to help protect themselves from predators. They are sensitive to climate change due to their dependence on intermittent and permanent aquatic habitats. Ensuring that any surface water runoff from the subject parcel is well managed to avoid pollutants, and that wetlands and stream areas and their associated buffers remain intact will help these amphibians survive.

The PHS report indicated occurrences of forage fish including surf smelt and Pacific sand lance, as well as a population segment of Pacific herring that is a Candidate species in Washington. Forage fish are a bottleneck in the marine food web, and their preservation and recovery is key to the survival of many fish and marine mammal species. Among the species that directly or indirectly depend on the stability of forage fish populations are salmon, seals, sea lions, and the endangered Southern Resident Killer Whales. While the subject parcel is located upland of the marine shoreline, the nearshore ecosystem is dependent on the health of the upland ecosystem. Ensuring that any surface water runoff from the subject parcel is well managed, and any wetlands and streams on the subject parcel are well-shaded and protected from pollution will help these fish survive. This recommendation also applies to the clam, crab, and shrimp species that occur near the subject parcel. No other species of interest was identified as associated with the subject parcel.

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Washington Department of Natural Resources Forest Practices Application Mapping Tool

The Washington Department of Natural Resources (WADNR) Forest Practices Application Mapping Tool (FPAMT) was reviewed to identify stream resources, including the presence of waterbody and stream types on and within 300 feet of the subject parcel. The FPAMT indicated the presence of one Type N (non-fish) stream and one pond within 300 feet of the subject parcel (Image 5).

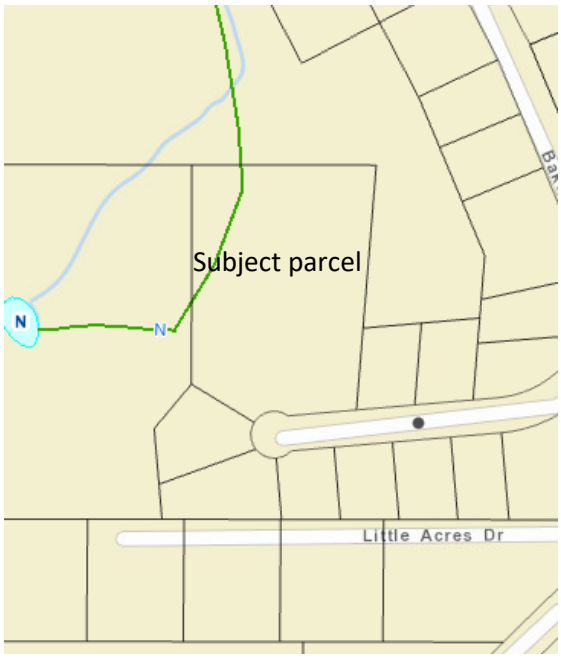

Image 5: FPAMT map of water types within 300 feet of the subject parcel.

Natural Resources Conservation Service Web Soil Survey

The Web Soil Survey (WSS) is compiled by the Natural Resources Conservation Service (NRCS) and includes mapped soil units registered to detailed descriptions of soil characteristics. The WSS maps three soil units onsite: Coupeville-Mitchellbay, cool, complex, 0-5% slopes accounts for 5.0 percent of the subject parcel; Mitchellbay gravelly sandy loam, cool, 2-10% slopes accounts for 47.1 percent; and Everett sandy loam, 15-40% slopes accounts for 47.9 percent (Image 6). A description of the soil units is provided below:

#1018 Coupeville-Mitchellbay, cool, complex, 0-5% slopes is comprised of two major components: Coupeville, undrained and Mitchellbay, cool. Coupeville, Undrained is described as a deep, poorly drained soil that occurs in valleys. Its capacity to transmit water is described as very low to moderately low. Its available water supply is described as high. It is reported to have a water table ranging from about 0 to 8 inches below surface grade. The soil column or profile is described as consisting of loam from 0 to 12 inches, clay loam from 12 to 50 inches, and silty clay loam from 50 to 59 inches. It is described as a hydric soil. Mitchellbay, Cool is described as a deep, somewhat poorly drained soil that occurs in valleys and valley sides. Its capacity to transmit water is described as very low to moderately low. Its available water supply is described as moderate. It is reported to have a water table ranging

from about 4 to 12 inches below surface grade. The soil column or profile is described as consisting of slightly decomposed plant material from 0 to 1 inches, gravelly sandy loam from 1 to 6 inches, sandy loam from 6 to 20 inches, and loam from 20 to 59 inches. It is not described as a hydric soil. Both soils are formed from glacial drift over dense glaciomarine deposits and the entire unit is described as prime farmland if drained. This soil does have one minor component: Coupeville, drained accounts for approximately 10% of the soil unit and is described as hydric.

#2019 Mitchellbay gravelly sandy loam, cool, 2-10% slopes is described as a deep, somewhat poorly drained soil that occurs on hillslopes. This soil is formed from glacial drift over dense glaciomarine deposits. Its capacity to transmit water is described as very low to moderately low. Its available water supply is described as moderate. It is reported to have a water table ranging from about 4 to 12 inches below surface grade. The unit is described as "all areas are prime farmland." The soil column or profile is described as consisting of slightly decomposed plant material from 0 to 1 inches, gravelly sandy loam from 1 to 6 inches, sandy loam from 6 to 20 inches, and loam from 20 to 59 inches. It is not described as hydric. Coupeville, undrained is a 10% component of this soil.

#3018—Everett sandy loam, 15-40% slopes is described as a deep, somewhat excessively drained soil that occurs on hillslopes. This soil is formed from glacial outwash. Its capacity to transmit water is described as high. Its available water supply is described as low. It is reported to have a water table more than 80 inches below surface grade. The unit is described as "not prime farmland." The soil column or profile is described as consisting of slightly decomposed plant material from 0 to 2 inches, sandy loam from 2 to 9 inches, gravelly sandy loam from 9 to 13 inches, very gravelly coarse sand from 13 to 30 inches, and extremely gravelly coarse sand from 30 to 59 inches. It is not described as hydric.

Image 6: WSS map of the soil units on the subject parcel.

Precipitation Data

Information on precipitation was obtained from the National Oceanic & Atmospheric Administration (NOAA) National Environmental Satellite, Data, and Information Service. NOAA information indicated that precipitation rates were normal prior to our field reconnaissance and sampling events.

5. Wetlands Site Reconnaissance

5.1 Data Collection

The field reconnaissance portion of the wetland site assessment was conducted on March 5 and 7, 2024. The subject parcel was observed for wetland indicators (hydrology, hydric soils, and hydrophytic vegetation). Offsite areas and areas greater than 300 feet from the subject parcel were determined to be outside of the scope of the field reconnaissance phase of this assessment.

5.2 Wetland Definition and Parameters

S&S utilized the 1987 Corps of Engineers Wetland Delineation Manual (Technical Report Y-87-1) (Corps Manual) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountain, Valleys, and Coast Region (Version 2.0/May 2010) (Regional Supplement) in the preparation of this report. The Corps Manual and its Regional Supplement represent the accepted standard protocols for identifying and delineating wetlands for jurisdictional purposes under the United States (U.S.) Federal Clean Water Act. The Corps Manual incorporates the U.S. Federal Clean Water Act Definition of wetlands as follows:

"*Those areas that are inundated or saturated by surface or groundwater 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 generally include swamps, marshes, bogs, and similar areas.*"

The definition requires that three interrelated defining elements or parameters be established and present when identifying wetlands. These parameters are wetland hydrology (hydrogeology), hydric soils, and hydrophytic vegetation.

Sample Point Locations – Sample points (SPs) were excavated at four locations onsite to evaluate the presence hydrologic indicators, hydric soils indicators, and the presence of hydrophytic vegetation. Sample Point locations were selected based on background research including aerial photograph interpretation. The background information/aerial photographs indicated the subject parcel has a slight slope adjacent to Bakerview Rd, and then sharply declines to the north. It then flattens out, with a slight slope to the north. Onsite, SPs were located in suspected wetland fringe areas with eight sample points in suspected wetland areas. Based on the findings of the sample points, the wetland boundary was delineated. SP locations are indicated in Table 1 below, which includes longitude and latitude coordinates. They are also indicated on the Wetland Site Plan in Attachment 1 and are flagged onsite.

Table 1: Sample Point (SP) locations.

Sample Point	Latitude	Longitude
SP-1	48.39180	-122.59072
SP-2	48.39180	-122.59063
SP-3	48.39162	-122.59071
SP-4	48.39164	-122.59090
SP-5	48.39152	-122.59085
SP-6	48.39150	-122.59112
SP-7	48.39156	-122.59108
SP-8	48.39174	-122.59112
SP-9	48.39152	-122.59125
SP-10	48.39154	-122.59167
SP-11	48.39167	-122.59169
SP-12	48.39181	-122.59125
SP-13	48.39200	-122.59065

Growing Season Determination – The Regional Supplement describes the procedure for determining if site reconnaissance is occurring during the growing season. This has important implications for evaluating certain wetland indicators, such as hydrology. Two indicators of biological activity that are readily observable in the field are (1) above-ground growth and development of vascular plants, and (2) soil temperature as an indicator of soil microbial activity. Either of these conditions may be used to determine if site reconnaissance is taking place within the growing season.

The emergence and elongation of leaves of woody plants was observed on two non-evergreen vascular plant species growing in the wetland or surrounding areas. Oso berry and salmonberry were both observed to be leafing out onsite. It is our professional opinion that site reconnaissance occurred within the growing season, at the beginning of the season.

Wetland Hydrology – Water is the driving force which creates and sustains wetlands. The Corps Manual and Regional Supplement identify wetlands as areas where soils are inundated or continuously saturated for a minimum of 5% of the growing season (approximately 14 days for Western Washington). When direct observations of standing water, a high groundwater table, or saturated soil conditions cannot be made, hydrology is determined by relying upon hydrologic indicators such as hydric soil characteristics, water marks, drift lines, sediment deposits, or drainage patterns. Table 2 below indicates the hydrology observed in each sample point including the depth of the sample point below site grade (bsg), depth of surface water, the water table, or soil saturation, and wetland hydrology indicators, if any.

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Photo 2: View of wetland hydrology observed onsite.

Table 2: Hydrology observed in Sample Points.

SP	SP depth	Surface water	Water table	Saturation	Wetland hydrology
SP-1	14”	Yes, 1”	Yes, 2”	Yes, 0”	Yes: A1, A2, A3, B5, B8, D2
SP-2	12”	No	No	No	No: D2 only
SP-3	14”	No	No	Yes, 14”	No
SP-4	12”	No	Yes, 8”	Yes, 6”	Yes: A2, A3, B8, D2
SP-5	15”	No	Yes, 14”	Yes, 10”	Yes: A3
SP-6	15”	Yes, 0”	Yes, 8”	Yes, 2”	Yes: A1, A2, A3
SP-7	15”	Yes, 0”	Yes, 0”	Yes, 0”	Yes: A1, A2, A3, C1, B9, D2
SP-8	16”	No	No	Yes, 0”	Yes: A1, C1
SP-9	16”	No	Yes, 4”	Yes, 0”	Yes: A2, A3, D2
SP-10	14”	No	No	No	No
SP-11	14”	No	Yes, 9”	Yes, 3”	Yes: A2, A3, B8
SP-12	16”	No	Yes, 10”	Yes, 7”	Yes: A2, A3, B8, C1, D2
SP-13	16”	No	Yes, 8”	Yes, 5”	Yes: A2, A3, C1, D2

Sampling for hydrology was completed during the winter with a high chance of inundation, at the beginning of the growing season. SP excavation holes were left open during the sampling process to allow groundwater levels to stabilize or for saturation to become evident. One primary wetland hydrology indicator or more than one secondary wetland hydrology indicator is required for a SP to meet wetland hydrology indicator criteria. The primary wetland hydrology indicators observed onsite include Surface Water (A1), High Water Table (A2), Saturation (A3), Iron Deposits (B5), Sparsely Vegetated Concave Surface (B8), and Hydrogen Sulfide Odor (C1). Indicators A1, A2, and A3 must be observed within the upper 12 inches of the soil column. Therefore, SP-3 does not meet indicator criteria for A3, and SP-5 does not meet indicator criteria for A2. The secondary wetland hydrology indicator criteria observed onsite include Water-Stained Leaves (B9) and Geomorphic Position (D2). Because more than one secondary indicator criteria are required, SP-2 did not meet wetland hydrology indicator criteria.

At least one primary wetland hydrology indicator and/or multiple secondary indicators was not observed in SP-2, SP-3, and SP-10, and it is our professional opinion that these SPs do not meet wetland hydrology indicator criteria. However, at least one primary wetland hydrology indicator and/or multiple secondary indicators was observed in SP-1, SP-4, SP-5, SP-6, SP-7, SP-8, SP-9, SP-11, SP-12, and SP-13, and it is our professional opinion that these SPs do meet wetland hydrology indicator criteria.

Hydric Soils – Field Indicators of Hydric Soils in the United States, v. 7.0, 2010 (Field Indicators) defines a hydric soil as a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part of the soil column. Most hydric soils exhibit characteristic morphologies that result from repeated periods of saturation or inundation for more than a few days. Saturation or inundation, when combined with microbial activity in the soil, causes the depletion of oxygen. This anaerobiosis promotes certain biogeochemical processes, such as the accumulation of organic matter and the reduction, translocation, or accumulation of iron and other reducible elements (Field Indicators).

These processes result in distinctive characteristics that persist in the soil during both wet and dry periods, making them useful for identifying hydric soils in the field (Field Indicators). Soil hue, chroma, and value assist in identification of hydric soils at the Sample Points and were obtained by comparing soil samples of the soil matrix and redoximorphic features in the soil profile utilizing color chips from Munsell Soil Color Charts (2009, published 2022). Soil colors, textures, and presence of redoximorphic features were recorded and hydric soils were determined using the indicators described in the Regional Supplement.

Sample Points 1-13

A summary of the characteristics of the soil profiles are indicated in Table 3 below:

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Table 3: Soil Characteristics in SPs.

SP	Depth (in)	Color	Redox	Texture	Hydric
SP-1	0-7	10YR 2/1	10YR 4/6, 7%, C, M	Clay	Yes: A11, F3, F6
	7-14	5Y 6/2	7.5YR 5/6, 3%, C, PL	Sandy clay	
SP-2	0-3	10YR 3/2	None	Sandy clay loam	Yes: A11, F3
	3-12	2.5Y 5/2	7.5YR 4/6, 8%, C, M		
SP-3	0-6	10YR 2/1	None	Clay loam	Yes: A11, F3
	6-14	5Y 5/1	10YR 5/6, 5%, C, M		
SP-4	0-6	10YR 3/2	None	Clay loam	Yes: A11, F3
	6-12	5Y 5/2	10YR 5/6, 10%, C, M		
SP-5	0-15	10YR 2/2	None	Sandy clay loam	No
SP-6	0-15	10YR 3/2	None	Sandy loam	No
SP-7	0-15	10YR 3/2	None	Sandy clay loam	Yes: A4
SP-8	0-16	10YR 2/1	None	Mucky peat w/ sand	Yes: A1, A4
SP-9	0-16	10YR 3/1	None	Mucky peat	Yes: A1
SP-10	0-7	2.5Y 3/2	None	Sandy clay loam	Yes: A11, F3
	7-14	5Y 6/2	10YR 5/6, 25%, C, M		
SP-11	0-5	2.5Y 3/2	10YR 4/6, 3%, C, M	Sandy loam	Yes: A11, F3
	5-14	10YR 4/1	5Y 5/2, 20%, D, M		
			10YR 4/6, 3%, C, M		
SP-12	0-16	7.5YR 2.5/1	5Y 6/1, 3%, D, M	Peat	Yes: A1, A4
			10YR 6/8, 2%, C, M	Clay loam (redox only)	
SP-13	0-16	7.5YR 2.5/1	None	Peat	Yes: A1, A4

The hydric soil indicators observed onsite include Histosol (A1), Hydrogen Sulfide (A4), Depleted Below Dark Surface (A11), Depleted Matrix (F3), and Redox Dark Surface (F6). While SP-5 and SP-6 do not meet hydric soil indicator criteria, it is our professional opinion that the soil profiles in SPs-1-4 and 7-13 do meet hydric soil indicator criteria.

Hydrophytic Vegetation – Vegetation of wetlands consists of plants adapted to thrive in anaerobic soil conditions. Dominant species were determined using the 50/20 rule. Dominant species from each stratum are those that cumulatively make up more than 50% relative cover per stratum, plus any additional species with 20 percent or more relative cover (Regional Supplement). The wetland indicator status for each dominant species was used to determine the presence or absence of hydrophytic plant communities based on the United States Army Corps of Engineers National Wetland Plant List.

The USFWS has classified wetland plant species according to a species frequency of occurrence in wetlands as follows:

- Obligate wetland species (OBL) occur in wetlands more than 99% of the time.
- Facultative wetland species (FACW) occur in wetlands more than 67% of the time.
- Facultative species (FAC) occur in wetlands 34%-67% of the time.
- Facultative upland species (FACU) occur in wetlands less than 34% of the time.
- Upland species (UPL) occur in wetlands less than 1% of the time.

Generally, the hydrophytic vegetation parameter is satisfied when:

a) Greater than 50% of the species present at an observation point have an indicator status of OBL, FACW, and/or FAC, or
b) When two or more dominant species have observed morphological or known physiological adaptions for occurrence in wetlands, or
c) when other indicators of hydrophytic vegetation are present.

Vegetation communities on the subject parcel are generally dominated by facultative and facultative upland species. These species can be found in both wetland and upland areas. A site reconnaissance, including site vegetation identification, was performed on March 5 and 7, 2024, at the beginning of the growing season.

Sample Points 1-13
The vegetation observed in the Sample Plots on the subject parcel consist of tree, sapling/shrub, and herb stratums. The tree stratum is dominated by red alder (FAC), Sitka spruce (FAC), red elderberry (FACU), and bigleaf maple (FACU). The sapling/shrub stratum is dominated by salmonberry (FAC), oso berry (FACU), and Himalayan blackberry (FAC). The herb stratum is dominated by field horsetail (FAC) and creeping buttercup (FAC).

Facultative upland species occur <34% of the time in a wetland environment, and facultative species occur 34-67% of the time in a wetland environment. It is our opinion that hydrophytic vegetation is present at all sample points.

5.3 Wetlands Identification

As summarized in Table 4 below, SP-1, SP-4, SP-7, SP-8, SP-9, SP-11, SP-12, and SP-13 included all three of the wetland indicator criteria required to be identified as a wetland. The criteria found in the Sample Points, including the topography, hydrology, and location of hydrophytic vegetation was applied to other areas onsite. The wetland boundary was delineated according to the topography, hydric soils, the presence of hydrologic indicators, and the presence of hydrophytic vegetation. A large wetland ecosystem, Wetland A, was identified onsite. Wetland A is located in the northern portion of the subject parcel and likely extends offsite to north, east, and west. Offsite areas were viewed remotely, and aerial photographs indicate Wetland A may encompass approximately 25 acres, of which approximately 1.75 acres is located on the subject parcel.

Table 4: Summary of Wetlands Findings

Sample Point	Hydrology	Hydric soils	Hydrophytic veg	Wetlands present
SP-1	Yes	Yes	Yes	Yes
SP-2	No	Yes	Yes	No
SP-3	No	Yes	Yes	No
SP-4	Yes	Yes	Yes	Yes
SP-5	Yes	No	Yes	No
SP-6	Yes	No	Yes	No
SP-7	Yes	Yes	Yes	Yes
SP-8	Yes	Yes	Yes	Yes
SP-9	Yes	Yes	Yes	Yes
SP-10	No	Yes	Yes	No
SP-11	Yes	Yes	Yes	Yes
SP-12	Yes	Yes	Yes	Yes
SP-13	Yes	Yes	Yes	Yes

The wetland identified in the SPs indicated in Table 4 (Wetland A) was rated according to the Island County Planning and Community Development Field Indicators Worksheet, Land Use Intensity Worksheet, and Wetland Buffer Worksheet. The Field Indicators Worksheet indicated that the subject parcel is affected by a wetland.

The Land Use Intensity Worksheet indicated a Low Intensity land use for the subject parcel. Pursuant to the Land Use Intensity Worksheet, low intensity requirements include the following standards to retain the low intensity designation: Structures, patios, and decks shall be set back 15 feet from the wetland buffer. Exterior lighting shall comply with standards in ICC 17.03 and must be shrouded and directed away from the wetland/wetland buffer area. Fertilizers, pesticides, and herbicides cannot be applied in a manner that will adversely affect the wetland/wetland buffer area. Storm water from impervious surfaces must be controlled before it reaches the wetland buffer area.

The Wetland Buffer Worksheet indicated a 75-foot buffer for a wetland with low land use intensity, an outlet for surface water discharge, and a habitat score of 33. The Wetland Areas Site Plan included in Attachment 1 indicates the approximate location of the wetland boundary and building setback.

While it is not necessary to determine the wetland type in order to complete the Island County Worksheets due to Wetland A's habitat score, ICC 17.02B.400(C) requires wetland assessments to describe the wetland type. The portion of Wetland A that occurs on the subject parcel is composed of two wetland types. The first type, which is greater than 1 acre with a tree stratum primarily comprised of trees larger than an 18-inch diameter, meets the criteria for a Type A, Mature Forested Wetland. The other portion of Wetland A meets the criteria for a Type D, Native Plant Wetland. The locations of these wetland types is included in the Wetland Areas Site Plan in Attachment 1.

5.4 PHS Mapped Species and Wildlife Observations

The PHS map indicated that the subject parcel and immediate vicinity is a sensitive location for big brown bat and little brown bat. Some standing woody debris adequate for roosting habitat was observed in Wetland A. Western toad occurs within 1000 feet of the subject parcel, and some portions of Wetland A may be suitable breeding habitat. The Type N streams/ditches that occur on the subject parcel appear to connect directly to the marine shoreline. The water quality of Wetland A is important for supporting the health of marine habitat and the following marine species that may be found within a half-mile of the subject parcel: Pacific Herring, surf smelt, Pacific sand lance, hard-shell clam species, pandalid shrimp species, Dungeness crab, and shorebirds (Image 4).

S&S directly observed *Haliaeetus leucocephalus* (bald eagles), *Sciurus* species (grey squirrel), woodpecker species, and songbird species on or near the subject parcel. S&S also heard members of the *Corvus* genus (corvids – ravens and crows), and hawk species, and observed the signs of *Odocoileus hemionus* ssp. *columbianus* (Columbian black-tailed deer) while onsite. S&S anticipates that *Canis latrans* (coyote) are likely in the area. Smaller mammal species such as *Procyon lotor* (racoon), various rabbit species, and *Didelphis virginianus* (opossum) are likely present at the site. The site and its vicinity are likely frequented by other avian species including various birds of prey. The site is also likely home to various amphibious and reptile species.

6. Buffer Alteration Request

6.1 Type 1 Reasonable Use Determination

It is the professional opinion of S&S that the applicant qualifies for a Type 1 Reasonable Use Determination to reduce the wetland buffer to build a single family residence on the subject parcel. The requirements outlined in ICC are below, along with S&S's comments *in italics* regarding the applicant's ability to meet the requirements outlined in ICC.

Pursuant to ICC 17.02B.310.C(1) – Wetlands permitted alterations, For a new single family dwelling and accessory structures or the expansion of existing single family dwellings or accessory structures on an existing lot, a wetland buffer alteration that cannot be avoided as required by section 17.02B.080.B. shall be approved through a Type I Reasonable Use Determination when:

A. Buffer alteration has not and will not exceed cumulatively 2,800 square feet;
    a. *The buffer alteration does not exceed 2,800 square feet, and is indicated on the Wetland Areas Site Plan included in Attachment 1.*
B. The development proposal is a reasonable use of the lot and the alteration of the required buffer has been reduced as required by section 17.02B.080.
    a. *The subject parcel is zoned as Rural. ICC 17.03.035.B indicates residential development is a permitted use within areas with the Rural zoning designation. Neighboring parcels are developed as single-family residences. Furthermore, a single-family residential development is a reasonable use of this lot, provided it is built outside of the altered wetland buffer area. It is not anticipated that this development with negatively impact the rural character of the area. The lot will remain primarily forested and natural, and the*

slopes onsite provide a clear demarcation of where the residence area transitions to become a more natural area.

b. Section 6.2 of this report addresses the mitigation sequencing required in ICC 17.02B.080.

C. Adverse impacts resulting from alterations of a steep slope or geologically hazardous area are minimized;
   a. *S&S recommends that the applicant contact Island County Public Works to ensure that they are in compliance with development standards on steep slopes/potential geologically hazardous areas. A geotechnical report may be required to ensure that compliance with this requirement is met.*

D. If the alteration cannot be restored as required by section 17.02B.080.B, the proposal includes mitigation required by this chapter;
   a. Section 6.2 of this report addresses the mitigation sequencing required in ICC 17.02B.080.
   b. *The proposed buffer reduction area is primarily vegetated by invasive Himalayan blackberry. The replacement of this species with native vegetation, primarily native shrub and small tree species, will enhance the wetland buffer area. Care should be taken to remove only invasive blackberries, while preserving other native species such as salmonberries (which can look very similar to Himalayan blackberries) and red elderberries. If the Himalayan blackberry infestation in the reduced area of the wetland buffer is treated and replaced with native vegetation, S&S anticipates that the buffer area will be enhanced in functionality and value despite the loss of square footage from this buffer reduction request.*
   c. *A mitigation plan or Type II Reasonable Use Determination may be prepared at the applicant's request if it is required by Island County.*

E. Temporary disturbance of critical areas and their buffers will be immediately repaired; and
   a. *The applicant shall be responsible for ensuring that any temporary disturbance to critical areas will be immediately repaired. S&S may be available upon request to provide technical assistance should disturbance occur.*

F. This action does not allow wetlands or fish and wildlife habitat conservation areas or their buffers to be converted to lawn or residential landscaping.
   a. *The applicant shall be responsible for abiding by this standard provided the Reasonable Use Determination is approved. They are reportedly planning to leave the parcel in as natural a state as possible once construction activities are completed onsite.*
   b. *S&S may develop a native vegetation planting plan at the request of the applicant.*

6.2 Mitigation Sequencing

Pursuant to ICC 17.02B.310.C(1)(b), the development proposal is a reasonable use of the lot and the alteration of the required buffer has been reduced as required by section 17.02B.080.B – General mitigation requirements.

Pursuant to ICC 17.02B.080.B – General mitigation requirements, When an impact to a critical area or critical area buffer is proposed, the applicant shall demonstrate that all reasonable efforts have been taken to mitigate impacts in the following prioritized order (consistent with WAC 197-11-768):

1. Avoiding the impact by not taking a certain action or parts of an action.
    a. *The majority of the subject parcel is undeveloped, and is a critical area or critical area buffer. The only area to develop a single-family residence is in the upland portion of the subject parcel, which is a small portion of the subject parcel. The geomorphology of this area presents challenges, such as steep slopes, which further limits development opportunities. The only reasonable place to develop this parcel is in the upland portion, which plateaus somewhat adjacent to Bakerview Rd. The reduction of the wetland buffer in this area allows the only developable portion of the subject parcel to be utilized, and will leave the vast majority of the subject parcel in its current state.*
2. Minimizing impacts by limiting the degree of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts.
    a. *The subject parcel is such that development of a single family residence cannot commence unless the wetland buffer area is somewhat reduced. The applicant shall manage erosion and surface water runoff during construction activities and from the increased impervious surface area from the single-family residence. S&S recommends an engineered design be implemented to ensure that excessive surface water runoff and sediment does not enter the wetland or wetland buffer area. The applicant plans to leave any vegetation in the reduced buffer area in as natural of a state as possible. The area is primarily vegetated with invasive Himalayan blackberry, and its removal and replacement with native vegetation shall enhance the habitat value of Wetland A. Any damage that occurs to the wetland or wetland buffer area during construction activities shall be repaired immediately.*
3. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
    a. *The subject parcel is such that development of a single family residence cannot commence unless the wetland buffer area is somewhat reduced. However, ample opportunity exists in the proposed development area and wetland buffer area to enhance wetland functionality by removing Himalayan blackberry and replacing it with native shrubs. Any impact made to the wetland buffer area should be rectified immediately, and Wetland A and its buffer should be returned to its previous or an enhanced functionality as soon as possible if damage occurs. Excessive surface water runoff and any additional sediment from construction activities and increased impervious surface area should not be allowed to enter the wetland buffer area.*
4. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
    a. *The subject parcel is such that development of a single family residence cannot commence unless the wetland buffer area is somewhat reduced. However, ensuring that the reduced buffer area vegetation is kept in as natural a state as possible, or an enhanced state with the removal of invasive species and their replacement with native shrub or small tree species will allow the functionality of the buffer to be enhanced. Reducing the impact of the single-family residence by pointing outdoor lights away from the wetland and its buffer, developing outside of the reduced wetland buffer area,*

managing water runoff from increased impervious surface area and during construction activities, and reducing erosion during construction activities will minimize the impact on the wetland. Sediments from construction activities should not be allowed to enter the wetland buffer area. Fertilizers, pesticides, and herbicides cannot be applied in a manner that will adversely affect the wetland/wetland buffer area. Storm water from impervious surfaces must be controlled before it reaches the wetland buffer area.

5. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments.
    a. *Removing invasive blackberries from the wetland buffer area and replacing them with native shrubs will likely improve the functionality of Wetland A and its buffer despite the loss of square footage in the reduced buffer area. If so required, a mitigation plan or Type II Reasonable Use Determination request may be prepared.*
6. Monitoring the impact and taking appropriate corrective measures.
    a. *If so required, a mitigation plan or Type II Reasonable Use Determination request may be prepared if required by Island County.*

7 Conclusion

A combination of hydrophytic vegetation, hydric soils, and hydrologic characteristics was identified in Sample Points SP-1, SP-4, SP-7, SP-8, SP-9, SP-11, SP-12, and SP-13 which represent a wetland complex, Wetland A, on the subject parcel. Wetland A likely extends offsite to the north, east, and west. In total, Wetland A is estimated to encompass approximately 25 acres, but the offsite areas were reviewed remotely and a final determination cannot be made due to its location on private property. The portion of Wetland A that is on the subject parcel was assessed onsite, and encompasses approximately 1.75 acres. Wetland A meets the criteria for a Type A Mature Forested Wetland in the northwestern portion, and the criteria for a Type D Native Plant Wetland in the southeastern portion as defined in the Island County Wetland Buffer Worksheet.

Pursuant to the Island County Land Use Intensity and Wetland Buffer Worksheets, Wetland A requires a 75-foot buffer. The 75-foot wetland buffer further requires a 15-foot structure setback. In addition to the structure setback, the Land Use Intensity Worksheet also requires that exterior lighting shall comply with standards in ICC 17.03 and must be shrouded and directed away from the wetland/wetland buffer area, fertilizers, pesticides, and herbicides cannot be applied in a manner that will adversely affect the wetland/wetland buffer area, and storm water from impervious surfaces must be controlled before it reaches the wetland buffer area.

It is the professional opinion of S&S that the applicant qualifies for a Type 1 Reasonable Use Determination and may reduce the wetland buffer area by 2,800 square feet to accommodate the development of a single family residence on the subject parcel.

The boundary for Wetland A, buffer for Wetland A, 15-foot structure setback, parcel boundaries, reduced buffer location, and potential building location are indicated on the Wetland Area Site Plan included in Attachment 1. Wetland boundaries are also flagged onsite.

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The following are recommendations that may be implemented:

- Silt fencing or equivalent erosion control measures should be maintained around the wetlands and associated buffer areas until construction activities are complete onsite.
- Construction equipment, materials, and waste onsite should be placed or stored outside of the wetland buffer area.
- Any disturbance to the wetland buffer that inadvertently occurs during construction activities should be remediated as soon as possible after construction is complete, and Wetland A and its associated buffer should be restored to its previous or enhanced condition.
- The Island County Noxious Weeds Program can provide resources for the removal of the following invasive species that were observed on the subject parcel: Himalayan blackberry and English holly.
- A Biological Site Assessment, Type II Reasonable Use Determination Request, Wetland Mitigation Plan, or Native Vegetation Planting Plan may be prepared at the client's request.
- S&S recommends that the client contact Island County Public Works to ensure that they are in compliance with development standards on steep slopes/geologically hazardous areas. A geotechnical report may be required to ensure that compliance with this requirement is met.
- An engineered design for stormwater management should be created and implemented to protect the wetland and its buffer from increased surface water runoff.

Spathe and Spadix Wetland Services and Environmental Consulting LLC utilized currently accepted methods of identifying critical areas onsite and offsite. The findings, recommendations, and conclusions rendered in this report represent our professional opinion. We appreciate the opportunity to be of service to you. Should you have any questions concerning this report or require further information, please do not hesitate to contact Spathe and Spadix Wetland Services and Environmental Consulting LLC.

Ann Prusha
Wetland Scientist, Biologist, Botanist
Spathe and Spadix Wetland Services and Environmental Consulting LLC

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information available at the time of its completion and as appropriate for the project scope of work. Services performed in developing the content of this document have been conducted in a manner consistent with that level and skill ordinarily exercised by members of the wetland assessment profession currently practicing under similar conditions. No warranty, expressed or implied, is made.

The report is not to be photographed, photocopied, or reproduced in total or in part without the consent of the client and S&S. The results and conclusions presented in this report are based on a site reconnaissance in a single season with data collection and analysis by currently accepted standards. Primary evidence was what we observed onsite and on maps and information which may have been incorrectly assessed. Site development may reveal site conditions different that those described in this assessment report. S&S should be promptly notified and advised of those conditions for consideration and re-evaluation which may require modification of the report findings, conclusions, and recommendations. The findings described in this report may be subject to review by regulatory agencies. The client should recognize that regulatory agencies may disagree with the findings of this report and/or may require amendments to the findings of this report. This wetland assessment report should be considered valid by agencies for 5 years under current site conditions. This report may need to be amended in the event of future changes or developments onsite. This report is not a survey. It is the responsibility of the property owner to verify all field measurements and elevations. The findings in this report are the interpretation of Spathe and Spadix Wetland Services and Environmental Consulting LLC. Regulatory agencies, including local jurisdictions, must give approval before the commencement of work onsite. It is the responsibility of the client, not S&S, to ensure that they are acting in accordance with local, state, and federal law and permitting requirements.

Attachment 1 –Wetland Areas Site Plan
Attachment 2 – Wetland Determination Data Sheets, Island County Wetland Identification Guide and associated worksheets

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ATTACHMENT 1

Wetland Areas Site Plan

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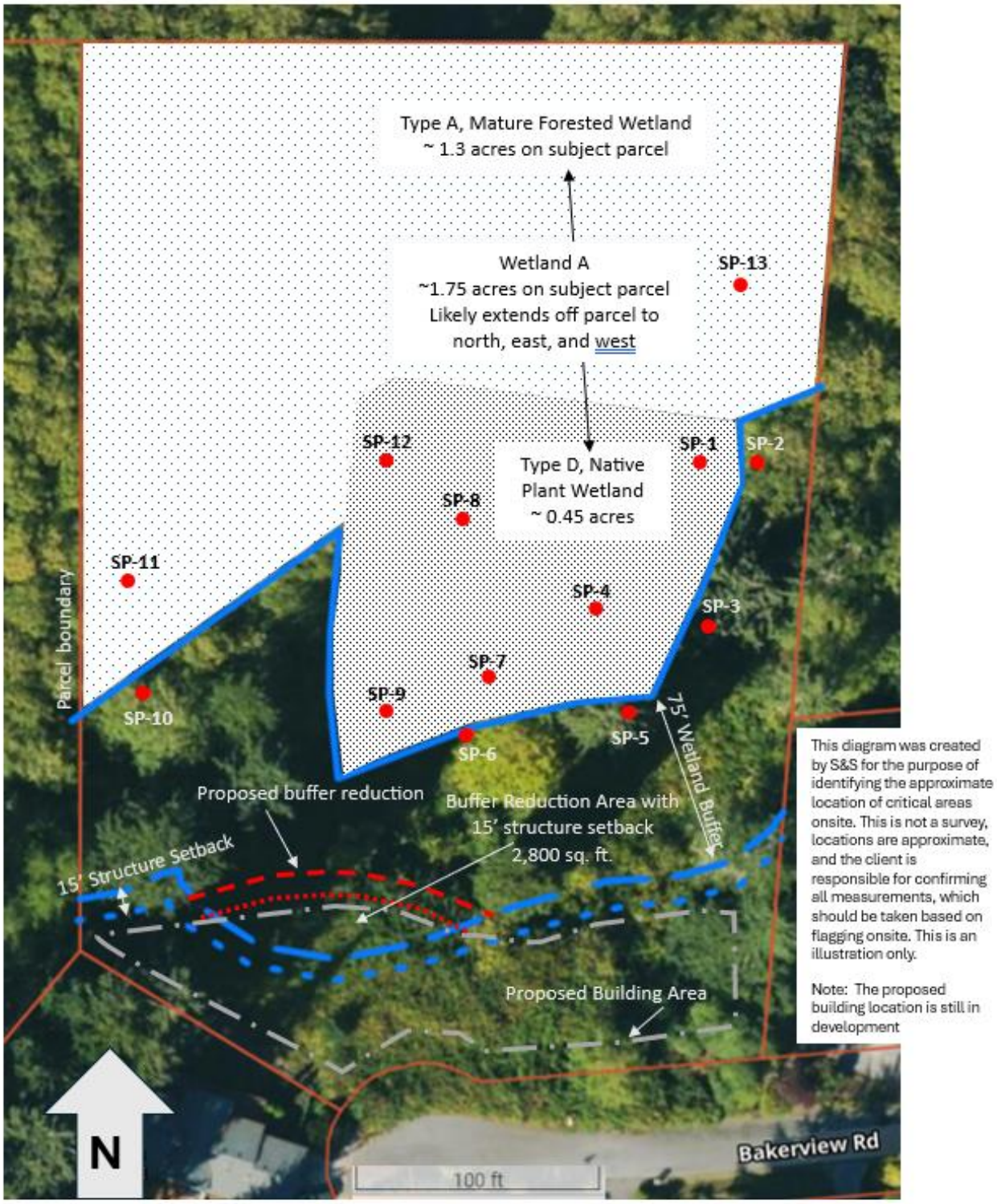
Wetland Areas Site Plan with Reduced Buffer



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ATTACHMENT 2

Wetland Determination Data Forms

Island County Wetland Identification Guide including Field Indicators Worksheet, Land Use Intensity Worksheet, and Wetland Buffer Worksheet

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

Project/Site: Bakerview Rd - R23432-305-0470 City/County: Oak Harbor/Island Sampling Date: March 5, 2024

Applicant/Owner: Brian Johnson State: WA Sampling Point: SP-1

Investigator(s): Ann Prusha, Spathe and Spadix LLC Section, Township, Range: Section 32, Township 34N, Range 02E

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope (%): 1

Subregion (LRR): A Lat: 48.39180 Long: -122.59072 Datum: NAV88

Soil Map Unit Name: Coupeville-Mitchellbay, cool, complex, 0-5%; Mitchellbay gravelly sandy loam, cool, 2-10%; Everett sandy loam, 15-40% NWI classification: PSSC, PEM1C

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:

Oemleria cerasiformis and Rubus spectabilis leafing out onsite; samples taken within the growing season.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	35	Yes	FAC
2. Picea sitchensis	25	Yes	FAC
3. Sambucus racemosa	10	No	FACU
4. Ilex aquifolium	5	No	FACU
	75	= Total Cover	
Sapling/Shrub Stratum (Plot size: 10')			
1. Rubus spectabilis	75	Yes	FAC
2. Oemleria cerasiformis	1	No	FACU
3.			
4.			
5.			
	76	= Total Cover	
Herb Stratum (Plot size: 3')			
1. None			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	0	= Total Cover	
Woody Vine Stratum (Plot size: 10')			
1. None			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 45

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

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

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Moss covers ~50% of ground in herb stratum plot.

SOIL

Sampling Point: SP-1

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 2/1	93	10YR 4/6	7	C	M	clay	
7-14	5Y 6/2	97	7/5YR 5/6	3	C	PL	sandy clay	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: clay

Depth (inches): 7

Hydric Soil Present? Yes X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

Surface Water Present? Yes X No ___ Depth (inches): 1

Water Table Present? Yes X No ___ Depth (inches): 2

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 0

Wetland Hydrology Present? Yes X No ___

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

Remarks:

Surface water present ~4' north of soil test pit.

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

Project/Site: Bakerview Rd - R23432-305-0470 City/County: Oak Harbor/Island Sampling Date: March 5, 2024

Applicant/Owner: Brian Johnson State: WA Sampling Point: SP-2

Investigator(s): Ann Prusha, Spathe and Spadix LLC Section, Township, Range: Section 32, Township 34N, Range 02E

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope (%): 2

Subregion (LRR): A Lat: 48.39180 Long: -122.59063 Datum: NAV88

Soil Map Unit Name: Coupeville-Mitchellbay, cool, complex, 0-5%; Mitchellbay gravelly sandy loam, cool, 2-10%; Everett sandy loam, 15-40% NWI classification: PSSC, PEM1C

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:

Oemleria cerasiformis and Rubus spectabilis leafing out onsite; samples taken within the growing season.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	45	Yes	FAC
2. Picea sitchensis	35	Yes	FAC
3. Sambucus racemosa	10	No	FACU
4. Ilex aquifolium	5	No	FACU
	95	= Total Cover	
Sapling/Shrub Stratum (Plot size: 10')			
1. Rubus spectabilis	25	Yes	FAC
2. Oemleria cerasiformis	10	Yes	FACU
3.			
4.			
5.			
	35	= Total Cover	
Herb Stratum (Plot size: 3')			
1. None			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	0	= Total Cover	
Woody Vine Stratum (Plot size: 10')			
1. None			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 20

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? **Yes** X **No** _____

Remarks:

Moss covers ~60% of ground in herb stratum plot.

SOIL

Sampling Point: SP-2

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/2	100	None				sandy clay loam	
3-12	2.5Y 5/2	92	7.5YR 4/6	8	C	M	sandy clay loam	soil became redder as exposed to air

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): N/A

Water Table Present? Yes _____ No X Depth (inches): N/A

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): N/A

Wetland Hydrology Present? **Yes** _____ **No** X

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

Remarks:

This is likely the wettest time of the growing season. If there is not hydrology now, it is unlikely that there is enough hydrology in regular precipitation years to meet wetland hydrology indicators.

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

Project/Site: Bakerview Rd - R23432-305-0470 City/County: Oak Harbor/Island Sampling Date: March 5, 2024

Applicant/Owner: Brian Johnson State: WA Sampling Point: SP-3

Investigator(s): Ann Prusha, Spathe and Spadix LLC Section, Township, Range: Section 32, Township 34N, Range 02E

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope (%): 4

Subregion (LRR): A Lat: 48.39162 Long: -122.59071 Datum: NAV88

Soil Map Unit Name: Coupeville-Mitchellbay, cool, complex, 0-5%; Mitchellbay gravelly sandy loam, cool, 2-10%; Everett sandy loam, 15-40% NWI classification: PSSC, PEM1C

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:

Oemleria cerasiformis and Rubus spectabilis leafing out onsite; samples taken within the growing season.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Picea sitchensis	75	Yes	FAC
2. Alnus rubra	10	No	FAC
3. Sambucus racemosa	10	No	FACU
4.			
	95	= Total Cover	
Sapling/Shrub Stratum (Plot size: 10')			
1. Rubus discolor	15	Yes	FAC
2. Rubus spectabilis	10	Yes	FAC
3. Oemleria cerasiformis	3	No	FACU
4.			
5.			
	28	= Total Cover	
Herb Stratum (Plot size: 3')			
1. None			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	0	= Total Cover	
Woody Vine Stratum (Plot size: 10')			
1. None			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

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

Hydrophytic Vegetation Present? **Yes** X **No** _____

Remarks:

Moss covers ~5% of ground in herb stratum plot; the rest of this area covered in plant debris and spruce needles.

SOIL

Sampling Point: SP-3

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 2/1	100	None				clay loam	
6-14	5Y 5/1	95	10YR 5/6	5	C	M	clay loam	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: clay

Depth (inches): 6

Hydric Soil Present? Yes X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): N/A

Water Table Present? Yes ___ No X Depth (inches): N/A

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 14

Wetland Hydrology Present? Yes ___ No X

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

Remarks:

This is likely the wettest time of the growing season; if there is no hydrology now, it is unlikely that there is enough hydrology in regular precipitation years to meet wetland hydrology indicators. Saturation must be present at less than 12" below surface to meet hydrology indicator criteria.

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

Project/Site: Bakerview Rd - R23432-305-0470 City/County: Oak Harbor/Island Sampling Date: March 5, 2024

Applicant/Owner: Brian Johnson State: WA Sampling Point: SP-4

Investigator(s): Ann Prusha, Spathe and Spadix LLC Section, Township, Range: Section 32, Township 34N, Range 02E

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): A Lat: 48.39164 Long: -122.59090 Datum: NAV88

Soil Map Unit Name: Coupeville-Mitchellbay, cool, complex, 0-5%; Mitchellbay gravelly sandy loam, cool, 2-10%; Everett sandy loam, 15-40% NWI classification: PSSC, PEM1C

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:

Oemleria cerasiformis and Rubus spectabilis leafing out onsite; samples taken within the growing season.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Picea sitchensis	60	Yes	FAC
2. Sambucus racemosa	20	Yes	FACU
3. Alnus rubra	20	Yes	FAC
4.			
	100	= Total Cover	
Sapling/Shrub Stratum (Plot size: 10')			
1. Rubus discolor	10	Yes	FAC
2. Oemleria cerasiformis	5	Yes	FACU
3. Rubus spectabilis	1	No	FAC
4.			
5.			
	16	= Total Cover	
Herb Stratum (Plot size: 3')			
1. None			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	0	= Total Cover	
Woody Vine Stratum (Plot size: 10')			
1. None			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 60 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

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

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Moss covers ~100% of ground in herb stratum plot

SOIL

Sampling Point: SP-4

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/2	100	None				clay loam	
6-12	5Y 5/2	90	10YR 5/6	10	C	M	clay loam	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: clay

Depth (inches): 6

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): N/A

Water Table Present? Yes X No ___ Depth (inches): 8

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 6

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

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

Project/Site: Bakerview Rd - R23432-305-0470 City/County: Oak Harbor/Island Sampling Date: March 5, 2024

Applicant/Owner: Brian Johnson State: WA Sampling Point: SP-5

Investigator(s): Ann Prusha, Spathe and Spadix LLC Section, Township, Range: Section 32, Township 34N, Range 02E

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope (%): 4

Subregion (LRR): A Lat: 48.39152 Long: -122.59085 Datum: NAV88

Soil Map Unit Name: Coupeville-Mitchellbay, cool, complex, 0-5%; Mitchellbay gravelly sandy loam, cool, 2-10%; Everett sandy loam, 15-40% NWI classification: PSSC, PEM1C

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation Yes, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:

Oemleria cerasiformis and Rubus spectabilis leafing out onsite; samples taken within the growing season. Vegetation was removed to make path.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Picea sitchensis	25	Yes	FAC
2. Alnus rubra	20	Yes	FAC
3.			
4.			
	45	= Total Cover	
Sapling/Shrub Stratum (Plot size: 10')			
1. Rubus discolor	50	Yes	FAC
2. Rubus spectabilis	10	No	FAC
3.			
4.			
5.			
	60	= Total Cover	
Herb Stratum (Plot size: 3')			
1. None			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	0	= Total Cover	
Woody Vine Stratum (Plot size: 10')			
1. None			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 5

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Moss covers ~15% of ground in herb stratum plot. Most of this area is covered in vegetative debris.

SOIL

Sampling Point: SP-5

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-15	10YR 2/2	100	None				sandy clay loam	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): N/A

Water Table Present? Yes X No _____ Depth (inches): 14

Saturation Present? (includes capillary fringe) Yes X No _____ Depth (inches): 10

Wetland Hydrology Present? Yes X **No** _____

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

Remarks:

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

Project/Site: Bakerview Rd - R23432-305-0470 City/County: Oak Harbor/Island Sampling Date: March 5, 2024

Applicant/Owner: Brian Johnson State: WA Sampling Point: SP-6

Investigator(s): Ann Prusha, Spathe and Spadix LLC Section, Township, Range: Section 32, Township 34N, Range 02E

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 3

Subregion (LRR): A Lat: 48.39150 Long: -122.59112 Datum: NAV88

Soil Map Unit Name: Coupeville-Mitchellbay, cool, complex, 0-5%; Mitchellbay gravelly sandy loam, cool, 2-10%; Everett sandy loam, 15-40% NWI classification: PSSC, PEM1C

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:

Oemleria cerasiformis and Rubus spectabilis leafing out onsite; samples taken within the growing season.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer macrophyllum	20	Yes	FACU
2. Picea sitchensis	20	Yes	FAC
3. Alnus rubra	20	Yes	FAC
4. Sambucus racemosa	5	No	FACU
	65	= Total Cover	
Sapling/Shrub Stratum (Plot size: 10')			
1. Rubus spectabilis	25	Yes	FAC
2. Sambucus racemosa	5	No	FACU
3.			
4.			
5.			
	30	= Total Cover	
Herb Stratum (Plot size: 3')			
1. Ranunculus repens	70	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	70	= Total Cover	
Woody Vine Stratum (Plot size: 10')			
1. None			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 5

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? **Yes** X **No** _____

Remarks:

Herb stratum plot area mostly covered with leaves and vegetative debris.

SOIL

Sampling Point: SP-6

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-15	10YR 3/2	100	None				sandy loam	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

Surface Water Present? Yes X No _____ Depth (inches): 0

Water Table Present? Yes X No _____ Depth (inches): 8

Saturation Present? (includes capillary fringe) Yes X No _____ Depth (inches): 2

Wetland Hydrology Present? Yes X **No** _____

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

Remarks:

Surface water ~5' northwest of sample point.

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

Project/Site: Bakerview Rd - R23432-305-0470 City/County: Oak Harbor/Island Sampling Date: March 5, 2024

Applicant/Owner: Brian Johnson State: WA Sampling Point: SP-7

Investigator(s): Ann Prusha, Spathe and Spadix LLC Section, Township, Range: Section 32, Township 34N, Range 02E

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): A Lat: 48.39156 Long: -122.59108 Datum: NAV88

Soil Map Unit Name: Coupeville-Mitchellbay, cool, complex, 0-5%; Mitchellbay gravelly sandy loam, cool, 2-10%; Everett sandy loam, 15-40% NWI classification: PSSC, PEM1C

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:

Oemleria cerasiformis and Rubus spectabilis leafing out onsite; samples taken within the growing season.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer macrophyllum	20	Yes	FACU
2. Picea sitchensis	20	Yes	FAC
3. Alnus rubra	20	Yes	FAC
4. Sambucus racemosa	5	No	FACU
	65	= Total Cover	
Sapling/Shrub Stratum (Plot size: 10')			
1. Rubus spectabilis	1	No	FAC
2.			
3.			
4.			
5.			
	1	= Total Cover	
Herb Stratum (Plot size: 3')			
1. Ranunculus repens	20	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	20	= Total Cover	
Woody Vine Stratum (Plot size: 10')			
1. None			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 5

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

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

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

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

Herb stratum plot area mostly covered with leaves and vegetative debris.

SOIL

Sampling Point: SP-7

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-15	10YR 3/2	100	None				sandy clay loam	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

Surface Water Present? Yes X No ___ Depth (inches): 0

Water Table Present? Yes X No ___ Depth (inches): 0

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** _____

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

Remarks:

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

Project/Site: Bakerview Rd - R23432-305-0470 City/County: Oak Harbor/Island Sampling Date: March 5, 2024

Applicant/Owner: Brian Johnson State: WA Sampling Point: SP-8

Investigator(s): Ann Prusha, Spathe and Spadix LLC Section, Township, Range: Section 32, Township 34N, Range 02E

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): A Lat: 48.39174 Long: -122.59112 Datum: NAV88

Soil Map Unit Name: Coupeville-Mitchellbay, cool, complex, 0-5%; Mitchellbay gravelly sandy loam, cool, 2-10%; Everett sandy loam, 15-40% NWI classification: PSSC, PEM1C

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:

Oemleria cerasiformis and Rubus spectabilis leafing out onsite; samples taken within the growing season.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. None			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 10')			
1. Rubus discolor	75	Yes	FAC
2. Rubus spectabilis	25	Yes	FAC
3.			
4.			
5.			
	100 = Total Cover		
Herb Stratum (Plot size: 3')			
1. Equisetum arvense	100	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: 10')			
1. None			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

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

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

E. arvense all died back, will likely reemerge in coming weeks.

SOIL

Sampling Point: SP-8

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 2/1	100	None				mucky peat w/ sand	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): N/A

Water Table Present? Yes _____ No X Depth (inches): N/A

Saturation Present? (includes capillary fringe) Yes X No _____ Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** _____

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

Remarks:

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

Project/Site: Bakerview Rd - R23432-305-0470 City/County: Oak Harbor/Island Sampling Date: March 5, 2024

Applicant/Owner: Brian Johnson State: WA Sampling Point: SP-9

Investigator(s): Ann Prusha, Spathe and Spadix LLC Section, Township, Range: Section 32, Township 34N, Range 02E

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): A Lat: 48.39152 Long: -122.59125 Datum: NAV88

Soil Map Unit Name: Coupeville-Mitchellbay, cool, complex, 0-5%; Mitchellbay gravelly sandy loam, cool, 2-10%; Everett sandy loam, 15-40% NWI classification: PSSC, PEM1C

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:

Oemleria cerasiformis and Rubus spectabilis leafing out onsite; samples taken within the growing season.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. None			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 10')			
1. Rubus discolor	60	Yes	FAC
2. Rubus spectabilis	40	Yes	FAC
3.			
4.			
5.			
	100 = Total Cover		
Herb Stratum (Plot size: 3')			
1. Equisetum arvense	20	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	20 = Total Cover		
Woody Vine Stratum (Plot size: 10')			
1. None			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum 75

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

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

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

E. arvense all died back, will likely reemerge in coming weeks. ~25% of ground covered in vegetative debris.

SOIL

Sampling Point: SP-9

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 3/1	100	None				mucky peat	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): N/A

Water Table Present? Yes X No ___ Depth (inches): 4

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** _____

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

Remarks:

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

Project/Site: Bakerview Rd - R23432-305-0470 City/County: Oak Harbor/Island Sampling Date: March 7, 2024

Applicant/Owner: Brian Johnson State: WA Sampling Point: SP-10

Investigator(s): Ann Prusha, Spathe and Spadix LLC Section, Township, Range: Section 32, Township 34N, Range 02E

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): A Lat: 48.39154 Long: -122.59167 Datum: NAV88

Soil Map Unit Name: Coupeville-Mitchellbay, cool, complex, 0-5%; Mitchellbay gravelly sandy loam, cool, 2-10%; Everett sandy loam, 15-40% NWI classification: PSSC, PEM1C

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:

Oemleria cerasiformis and Rubus spectabilis leafing out onsite; samples taken within the growing season.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	25	Yes	FAC
2. Sambucus racemosa	5	No	FACU
3.			
4.			
	30 = Total Cover		
Sapling/Shrub Stratum (Plot size: 10')			
1. Rubus spectabilis	25	Yes	FAC
2. Oemleria cerasiformis	10	Yes	FACU
3.			
4.			
5.			
	35 = Total Cover		
Herb Stratum (Plot size: 3')			
1. Ranunculus repens	10	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	10 = Total Cover		
Woody Vine Stratum (Plot size: 10')			
1. None			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum 30

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? **Yes** X **No** _____

Remarks:

Moss covers ground in ~60% of herb stratum sample plot.

SOIL

Sampling Point: SP-10

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-7	2.5Y 3/2	100	None				sandy clay loam	
7-14	5Y 6/2	75	10YR 5/6	25	C	M	sandy clay loam	charcoal

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Sand is likely outwash from nearby hillslope and WL.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): N/A

Water Table Present? Yes _____ No X Depth (inches): N/A

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): N/A

Wetland Hydrology Present? **Yes** _____ **No** X

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

Remarks:

This is likely the wettest time of the growing season; if the area does not have wetland hydrology now, it likely will not during typical precipitation years.

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

Project/Site: Bakerview Rd - R23432-305-0470 City/County: Oak Harbor/Island Sampling Date: March 7, 2024

Applicant/Owner: Brian Johnson State: WA Sampling Point: SP-11

Investigator(s): Ann Prusha, Spathe and Spadix LLC Section, Township, Range: Section 32, Township 34N, Range 02E

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 4

Subregion (LRR): A Lat: 48.39167 Long: -122.59169 Datum: NAV88

Soil Map Unit Name: Coupeville-Mitchellbay, cool, complex, 0-5%; Mitchellbay gravelly sandy loam, cool, 2-10%; Everett sandy loam, 15-40% NWI classification: PSSC, PEM1C

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:

Oemleria cerasiformis and Rubus spectabilis leafing out onsite; samples taken within the growing season.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	20	Yes	FAC
2. Sambucus racemosa	5	Yes	FACU
3.			
4.			
	25	= Total Cover	
Sapling/Shrub Stratum (Plot size: 10')			
1. Rubus spectabilis	60	Yes	FAC
2. Oemleria cerasiformis	10	No	FACU
3.			
4.			
5.			
	70	= Total Cover	
Herb Stratum (Plot size: 3')			
1. None			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	0	= Total Cover	
Woody Vine Stratum (Plot size: 10')			
1. None			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 20

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

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

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

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Moss covers ground in ~60% of herb stratum sample plot.

SOIL

Sampling Point: SP-11

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	2.5Y 3/2	97	10YR 4/6	3	C	M	sandy loam	
5-14	10YR 4/1	77	5Y 5/2	20	D	M	sandy loam	
			10YR 4/6	3	C	M	sandy loam	concentrations only found w/in depletions

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): N/A

Water Table Present? Yes X No _____ Depth (inches): 9

Saturation Present? (includes capillary fringe) Yes X No _____ Depth (inches): 3

Wetland Hydrology Present? **Yes** X **No** _____

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

Remarks:

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

Project/Site: Bakerview Rd - R23432-305-0470 City/County: Oak Harbor/Island Sampling Date: March 7, 2024

Applicant/Owner: Brian Johnson State: WA Sampling Point: SP-12

Investigator(s): Ann Prusha, Spathe and Spadix LLC Section, Township, Range: Section 32, Township 34N, Range 02E

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 2

Subregion (LRR): A Lat: 48.39181 Long: -122.59125 Datum: NAV88

Soil Map Unit Name: Coupeville-Mitchellbay, cool, complex, 0-5%; Mitchellbay gravelly sandy loam, cool, 2-10%; Everett sandy loam, 15-40% NWI classification: PSSC, PEM1C

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:

Oemleria cerasiformis and Rubus spectabilis leafing out onsite; samples taken within the growing season.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	75	Yes	FAC
2.			
3.			
4.			
	75	= Total Cover	
Sapling/Shrub Stratum (Plot size: 10')			
1. Rubus spectabilis	35	Yes	FAC
2. Rubus discolor	20	Yes	FAC
3. Ilex aquifolium	5	No	FACU
4.			
5.			
	60	= Total Cover	
Herb Stratum (Plot size: 3')			
1. Equisetum arvense	5	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	5	= Total Cover	
Woody Vine Stratum (Plot size: 10')			
1. None			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 20

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Ground primarily covered in leaves and debris in herb stratum plot.

SOIL

Sampling Point: SP-12

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	7.5YR 2.5/1	95	5Y 6/1	3	D	M	peat	redox features have clay-loam texture
			10YR 6/8	2	C	M		concentrations only found w/in depletions

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): N/A

Water Table Present? Yes X No _____ Depth (inches): 10

Saturation Present? (includes capillary fringe) Yes X No _____ Depth (inches): 7

Wetland Hydrology Present? **Yes** X **No** _____

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

Remarks:

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

Project/Site: Bakerview Rd - R23432-305-0470 City/County: Oak Harbor/Island Sampling Date: March 7, 2024

Applicant/Owner: Brian Johnson State: WA Sampling Point: SP-13

Investigator(s): Ann Prusha, Spathe and Spadix LLC Section, Township, Range: Section 32, Township 34N, Range 02E

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): convex Slope (%): 1

Subregion (LRR): A Lat: 48.39200 Long: -122.59065 Datum: NAV88

Soil Map Unit Name: Coupeville-Mitchellbay, cool, complex, 0-5%; Mitchellbay gravelly sandy loam, cool, 2-10%; Everett sandy loam, 15-40% NWI classification: PSSC, PEM1C

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:

Oemleria cerasiformis and Rubus spectabilis leafing out onsite; samples taken within the growing season.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	50	Yes	FAC
2.			
3.			
4.			
	50 = Total Cover		
Sapling/Shrub Stratum (Plot size: 10')			
1. Rubus spectabilis	60	Yes	FAC
2. Oemleria cerasiformis	10	No	FACU
3. Rubus discolor	1	No	FAC
4. Ilex aquifolium	1	No	FACU
5.			
	72 = Total Cover		
Herb Stratum (Plot size: 3')			
1. None			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	0 = Total Cover		
Woody Vine Stratum (Plot size: 10')			
1. None			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Moss covers ~100% of ground in herb stratum with some vegetative debris on top.

SOIL

Sampling Point: SP-13

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	7.5YR 2.5/1	100	None				peat	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): N/A

Water Table Present? Yes X No _____ Depth (inches): 8

Saturation Present? (includes capillary fringe) Yes X No _____ Depth (inches): 5

Wetland Hydrology Present? **Yes** X **No** _____

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

Remarks:

Island County Planning and Community Development
Field Indicators Worksheet

The Field Indicators Worksheet will help you and the County determine if a wetland or wetland buffer is on your property. Applicants for permits for single family residential uses must either complete this Worksheet or, at their option, hire a wetland professional to complete a Wetland Report that includes the elements of the Worksheet. All other applicants (commercial or non-residential) must do the latter, if the County verifies that the development proposal is for land that contains or is affected by a wetland.

The comments section of this Worksheet may be used to record any particulars or information about your property. You may attach additional pages and photographs.

The County will verify the information provided in this Worksheet or related wetland report.

This Worksheet must be included with every application for development. Prospective purchasers may also ask the County to review the Worksheet to assist them in determining whether the property they are interested in purchasing contains wetlands.

Applicant Name (please print)**:** Brian Johnson **Date:** 3/15/2024

Parcel or Key Number: R23432-305-0470

Hydrology

The presence of water is the most obvious and common indicator of a wetland. There are several factors that must be considered in describing whether or not you have water on your property. Some wetlands have standing water all year long; others are soggy only during wetter months of the year; and, others appear wet only after storm events.

1. Is there ever standing water on the property?
   ☑ Yes ☐ No
   If No, proceed to question #3
   If Yes, is it:
   ☐ 4 weeks - 4 months ☑ 4 months - 8 months - Seasonally ☐ 8 months - Year Round

---

2. If you answered yes to question #1, are the surrounding adjacent areas:
   Topographically higher ☑ Yes ☐ No
   Topographically lower ☑ Yes ☐ No
   Topographically the same elevation ☑ Yes ☐ No

---

3. When you dug the hole, did you observe any water within 10 inches of the ground surface?
   ☑ Yes ☐ No

---

4. Identify any features through which water flows onto your property (Check all that apply)
   ☑ Stream ☐ Culverts ☑ Ditches ☐ Roadside Ditch
   ☐ Storm Drains ☐ Ponds, lakes, estuaries ☐ Pumps ☐ Other_____

---

5. Identify any features through which water flows off of your property (Check all that apply)
   ☑ Stream ☐ Culverts ☑ Ditches ☐ Roadside Ditch
   ☐ Storm Drains ☐ Ponds, lakes, estuaries ☐ Pumps ☐ Other_____

---

6. Are there defined ditches/channels on, or near your property that have water?
   ☐ Yes, there are ditches/channels that have occasional water flow (e.g. after storm events).
   ☑ Yes, there are ditches/channels that have regular water flow during wet months.
   ☐ Yes, there are ditches/channels that have water flow all year long.
   ☐ No, there are no defined channels
   If Yes, how wide is defined channel?
   ☑ Large (>2 ft across) ☐ Small (<2 ft across) ☐ Grass Lined Swale (dried up pond)

Comments:

Hydrology Map

Please refer to the *Hydrology Map Example* found in the *Wetland Identification Guide* for instructions

Draw a close approximation of the features you listed in questions 1-6 of the Hydrology section of the Field Indicators Worksheet. Please label the features and approximate dimensions. You may also include areas where wetland vegetation was observed and sites where you performed your soil samples. An organized and informative drawing will help make our site visit more efficient. For greater accuracy, you may obtain an aerial map of your parcel from the Island County Planning and Community Development offices, and use it as the base layer for your map. The Hydrology Map section of the *Island County Wetland Identification Guide* has further information.

Comments:

See the Critical Area Site Plan in the Wetland Assessment Report for a more accurate image of the wetland hydrology features on the subject parcel. All wetland areas indicated in the Site Plan will have wetland hydrology. The streams/ditches and topographic lines are clearly indicated on the LiDAR image above.

Vegetation

Only certain types of vegetation can survive in wetland conditions. In fact, some plants, trees and shrubs live nowhere else except in wetlands, e.g. skunk cabbage. Other types of vegetation are tolerant of both wet and drier conditions, e.g. salmonberry and alder. Most trees and plants look different depending upon the time of the year. This can make it difficult to identify exactly what's on your property. Numerous photographs of the more common types of wetland vegetation are shown during different seasons. **Please include these observations in your Hydrology Map.**

7. Are there any native wetland plants on the property that are identified in the Wetland Vegetation section of the Wetland Identification Guide? (Check all that apply)

☐ Slough Sedge	☐ Cooleye's Hedge Nettle	☐ Crabapple	☐ Red Stemmed Dogwood
☐ Labrador Tea	☐ Water Parsley	☑ Skunk Cabbage	☐ American Speedwell
☐ Cat Tail	☐ Common Rush	☐ Willows	☑ Red Alder
☐ Salmonberry	☐ Nootka Rose	☐ Bull Rush	☐ Western Red Cedar
☐ Pacific Silverweed	☑ Sitka Spruce	☐ Hardhack	☐ Grasses (other than lawn)

8. Are there any non-native wetland plants on the property that are identified in the Wetland Vegetation section of the Wetland Identification Guide?

☑ Creeping Buttercup	☐ Reed Canary Grass	☐ Yellow Iris	☑ Himalayan Blackberry
☐ Eurasian Milfoil	☐ Evergreen Blackberry	☐ Velvetgrass	
☐ Canadian Thistle/ Bull Thistle	☐ Hairy Willow-herb		

Comments:

See the Critical Area Site Plan for details and map of wetland area.

Soil

While water and vegetation can be identified by simply observing what is on your property, learning about your soils will take a little more work. Soil characteristics change as a result of the regular presence of water. Minerals in the soil will start to rust and organics are unable to decompose. By digging some holes you can see whether or not the area you are looking at is in fact a wetland. The Wetland Identification Guide's Soil section provides additional information that you may find useful in answering the following questions. You will need to dig a hole 12 inches deep in order to answer the following questions. **Please include the locations <u>where</u> you took your soil samples in your Hydrology Map.**

9. Indicate the color of the soil at the bottom of the 12 inch deep hole that you dug.

☑ Dark Black ☑ Grey w/rust spots ☑ Brown

10. Does the soil smell sulfuric? (like rotten eggs)

☑ Yes ☑ No ☑ At Times

11. If you take a tablespoon size sample of the soil and squeeze it, is it saturated with water?

☑ Yes ☑ Moderate/Soil is damp ☑ No. Soil is dry

Comments:

See Critical Area Site Plan for details and map.

Island County Planning and Community Development
LAND USE INTENSITY WORKSHEET

For all applications for any development proposal related to a Single Family Home that involves property **containing or affected by a wetland**, the single family landowner/applicant must either complete this Worksheet, or at their option they may hire a wetland professional to prepare a wetland report that includes the elements of this worksheet. For all other applications (non-residential or commercial), a private wetland professional must prepare a wetland report that contains the elements of this worksheet.

This Worksheet helps the County determine the Intensity of the uses or structures proposed for development. Land Use Intensity is a key determiner of the appropriate wetland buffer size.

Wetland buffers are established by two factors: 1) the type of wetland, and 2) the intensity of the development for your land. For property that is or will be developed for a single family home use, the *Rural Stewardship Plan* is an option for landowners to utilize for reducing a property's land use intensity level and protecting natural resources. Please ask Planning staff for more information about the Rural Stewardship Plan.

Applicant Name (please print)**:** Brian Johnson **Date:** 3/15/2024

Parcel or Key Number: R23432-305-0470

Intensity Level (circle one)**:** **Low** ☑ **Medium** ☐ **High** ☐

For County Use Only

Confirmation Date: _____ **Confirmed By:** _____

1. Land Use & Parcel Size (Check one):

☐ My lot is, or will be, used for commercial, industrial, or other non-residential purposes – If you checked this, please select one of the following:

- ☐ My lot is **less** than 5 acres - If you checked this, yours is likely a **High** intensity use and you do not need to continue with this worksheet.
- ☐ My lot is **greater than or equal to** 5 acres - If you checked this, yours is likely a **Medium** intensity use and you do not need to continue with this worksheet.

☑ My lot is, or will be, used for residential purposes - If you checked this, please select one of the following:

- ☐ My lot is **less than 1 acre.** If you checked this, yours is a **High** intensity use.
- ☐ My lot is from **1 acre to 2.49 acres** in size – Proceed to Question 2.a
- ☑ My lot is from **2.5 acres to 4.99 acres** – Proceed to Question 2.b
- ☐ My lot is from **5 acres to 9.99 acres** in size - Proceed to Question 2.c
- ☐ My lot is from **10 acres to 19.99 acres** in size - Proceed to Question 2.d
- ☐ My lot is greater than or equal to **20 acres in size** - Proceed to Question 2.e

---

2. Cleared area and/or impervious surface for residential uses:
If your parcel qualifies for 2 different Land Use Intensity ratings, you must choose the higher intensity rating.

a. Lots 1 acre to 2.49 acres (check one of the following):

- ☐ More than 50% of my lot is, or will be, cleared **or** more than 10% of my lot is, or will be, covered with an impervious surface – You are **High** intensity*
- ☐ Less than 35% of my lot is, or will be, cleared **and** less than 5% of my lot is, or will be, covered with an impervious surface – You are **Low** intensity - proceed to question 3
- ☐ From 35% to 50% of my lot is, or will be, cleared, **or** from 5% to 10% of the lot is or, will be, covered with an impervious surface – You are **Medium** intensity*

b. Lots **2.5 acres to 4.99 acres** (check one of the following):

- ☐ More than 45% of my lot is, or will be, cleared **or** more than 10% of my lot is, or will be, covered with an impervious surface – You are initially **High** intensity*
- ☑ Less than 30% of my lot is, or will be, cleared **and** less than 5% of my lot is, or will be, covered with an impervious surface – You are initially **Low** intensity - Proceed to question 3
- ☐ From 30% to 45% of my lot is, or will be, cleared **or** from 5% to 10% of the lot is, or will be, covered with an impervious surface – You are **Medium** intensity*

c. Lots **5 acres to 9.99 acres** (check one of the following):

- ☐ More than 40% of my lot is, or will be, cleared **or** more than 10% of my lot is, or will be, covered with an impervious surface – You are initially **High** intensity*
- ☐ Less than 25% of my lot is, or will be, cleared **and** less than 5% of my lot is, or will be, covered with an impervious surface – You are initially **Low** intensity - Proceed to question 3
- ☐ From 25% to 40% of my lot is, or will be, cleared **or** from 5% to 10% of the lot is, or will be, covered with an impervious surface – You are **Medium** intensity*

d. Lots **10 acres to 19.99 acres** (check one of the following):

- ☐ More than 35% of my lot is, or will be, cleared **or** more than 10% of my lot is, or will be, covered with an impervious surface – You are initially **High** intensity*
- ☐ Less than 20% of my lot is, or will be, cleared **and** less than 5% of my lot is, or will be, covered with an impervious surface – You are initially **Low** intensity - Proceed to question 3
- ☐ From 20% to 35% of my lot is, or will be, cleared **or** from 5% to 10% of the lot is, or will be, covered with an impervious surface – You are **Medium** intensity*

e. Lots **greater than or equal to 20 acres** (check one of the following):

- ☐ More than 30% of my lot is, or will be, cleared **or** more than 10% of my lot is, or will be, covered with an impervious surface – You are initially **High** intensity*
- ☐ Less than 15% of my lot is, or will be, cleared **and** less than 5% of my lot is, or will be, covered with an impervious surface – You are initially **Low** intensity - Proceed to question 3
- ☐ From 15% to 30% of my lot is, or will be, cleared **or** from 5% to 10% of the lot is, or will be, covered with an impervious surface – You are **Medium** intensity*

---

3. Low Intensity Requirements:

Residential uses that are classified as Low intensity **must include each** of the following standards in order to retain the low intensity designation.

- Structures, patios and decks shall be setback fifteen (15) feet from the outer edge of the wetland buffer; and
- Exterior lighting fixtures shall comply with the lighting standards of Chapter 17.03 ICC and shall be shrouded and directed away from a Wetland or Wetland Buffer; and
- Fertilizers, pesticides and herbicides shall not be applied in a manner that adversely impacts Wetland Functions or their Wetland Buffers; and
- Storm water from Impervious Surfaces shall be controlled before it reaches the Wetland Buffer.

**Note: A Land Use Intensity rating may be reduced through enrollment in the County's Rural Stewardship Plan. A commitment to the requirements outlined in the RSP can reduce your property's intensity score from High to Medium, or from Medium to Low. Such a reduction comes with significant added responsibility for current and future landowners. Please contact Planning and Community Development staff for more information.*

Island County Planning and Community Development
WETLAND BUFFER WORKSHEET

This Wetland Buffer Worksheet must be submitted with any development proposal related to a Single Family Home that involves property containing or affected by a wetland; or, at the single family homeowner's option, a Wetland Report including the elements of this Worksheet can be prepared by a Wetland Professional hired by the Single Family homeowner/applicant. A wetland report containing the elements of this worksheet, and prepared by a private wetland professional, will be required of all other applicants (non-residential or commercial) when the proposed development is on land that contains or is affected by a wetland or wetland buffer.

The following questions are designed to help you identify important characteristics of the wetland and the area surrounding it. Your answers should apply to the **entire wetland**, not just the part that is on your property. This Worksheet, along with information from the Land Use Intensity Worksheet, will help County planners determine the buffer width for your wetland. A buffer is the vegetated area adjacent to the boundary of a wetland that protects it from disturbance and inputs to protect water quality and habitat.

Applicant Name (please print)**:** Brian Johnson **Date:** 3/15/2024

Habitat Score: 33 (from Page WBW:7 of this Worksheet)

Wetland Buffer: 75 feet

For County Use Only

Confirmation Date: _____ **Confirmed By:** _____

Describe and Score the Wetland and Its Surroundings

1. High Priority Wetland Type

Does all or part of your wetland meet the definition of any of the following wetland types? Maps showing known locations of these types are available from the County. However, not all locations are known, so you should evaluate your wetland independently to see if it meets these definitions.

_☐_ **Bog**: A relatively undisturbed Wetland with at least seventy percent (70%) ground cover of mosses; or with water with a pH of less than 5.0; or with more than thirty percent (30%) cover of Sitka Spruce, Western Red Cedar, Western Hemlock or Lodgepole Pine; and a preponderance of plants that are listed as bog species in Table 3 of the *2004 Wetland Rating System* prepared by the Washington State Department of Ecology; and having Peat or Muck soils at least sixteen (16) inches deep. Many Bogs are fed largely by precipitation. County maps identify the location of some but not all Bogs. *See* also Relict Bog. *If the criteria are met, put an "X" the space at the beginning of this definition.* Many Bogs have acidic conditions, low nutrient levels; soils classified as peat or muck; and are fed largely by precipitation.

_☐_ **Coastal Lagoon Wetland:** A wetland located within a shallow water body adjacent to marine waters that is partly or completely separated from Puget Sound by a barrier beach. A Coastal Lagoon receives periodic influxes of salt water which may occur from storm surges or flow through porous beach sediments. The water in a Coastal Lagoon is saline or brackish (>0.5 ppt measured near the bottom) during most of the year. *If the criteria are met, put an "X" in the space at the beginning this definition.*

_☐_ **Delta Estuary Wetland:** An Estuarine wetland located directly adjacent to or within a Delta Estuary. These wetlands are located on the north end of Camano Island adjacent to the mouth of the Skagit and Stillaguamish Rivers. *If the criteria are met, put an "X" in the space at the beginning of this definition.*

___ **Estuarine Wetland:** A tidal wetland containing emergent vegetation that is usually semi-enclosed by land but has open or partly obstructed access to Puget Sound. *If the criteria are met, put an "X" in the space at the beginning of this definition.*

If the wetland meets one of the above, your buffer can be determined from the chart below; if not, please continue to the remaining questions.

The type of wetland you marked above gives a preliminary determination of the width of the buffer that may be recommended for a new Development Proposal. Select the largest applicable buffer from Table 1 below. **You are then done with this assessment.**

Table 1

Intensity Level (Intensity Worksheet)	**Bog**	**Coastal Lagoon wetland**	**Delta Estuary wetland**	**Estuarine**
Low	125 ft	100 ft	40 ft	30 ft
Moderate	190 ft	150 ft	90 ft	55 ft
High	250 ft	200 ft	125 ft	90 ft

2. Vegetation Forms (maximum of 4 points):

Which kinds of plant forms cover more than 10% of the wetland's vegetated area? *Mark each kind with a "1" in the line next to it.*

Aquatic Plants (e.g., coontail, pond lily) _____
Herbs (e.g., grasses, wildflowers, ferns) 1
Shrubs (e.g., willow, elderberry, alder, salmon berry) 1
Trees (e.g., cedar, sitka spruce, hemlock) 1

Sum the numbers and insert here (Maximum of 4 points): 3

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3. Non-native Plant Cover (maximum of 6 points)

Are non-native plants present <u>in</u> your wetland? *Check all that apply.*

Non-native Shrubs and Vines (a partial list):

☑ Himalayan Blackberry
☐ Evergreen Blackberry
☑ Holly
☐ Others. List: _____

Non-Native Herbs (a partial list):

☐ Reed Canary Grass
☐ Velvetgrass
☑ Creeping Buttercup
☐ Yellow Iris
☐ Hairy Willow-herb
☐ English Ivy
☐ Canada Thistle, Bull Thistle
☐ Eurasian Milfoil
☐ Others. List: _____

* Note: This list is not comprehensive. You may wish to consult *Flora of the Pacific Northwest* (C. Leo Hichcock and Arthur Cronquist, University of Washington Press)

*Now estimate the approximate percent of the entire wetland's **vegetated area** covered by non-native species:*

___ Less than 5% (6 points; put "6" in the space to the left)
3 From 5 to 50% (3 points; put "3" in the space to the left)
___ More than 50% (0 points; put "0" in the space to the left)

Insert the point value here (Maximum of 6 points): 3

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4. Dead Wood (maximum of 2 points):

What kind of dead wood is found in the wetland? *Insert the points at the beginning of all lines where applicable.*

1 Multiple large fallen logs greater than 4 inches in diameter at their base and longer than 6 ft (1 point)
1 Multiple large standing dead trees greater than 4 inches in diameter at chest height (1 point)
___ Neither of the above (0 points)

Sum the numbers and insert here (Maximum of 2 points): 2

The following questions describe how wetlands on your property are connected with other natural areas. These questions are important because they help describe how your wetlands fit into larger ecosystems, and that in turn partly determines their importance to wildlife and plants. Maps and aerial photographs available online or at the counter of the Planning Department can assist you in answering these questions.

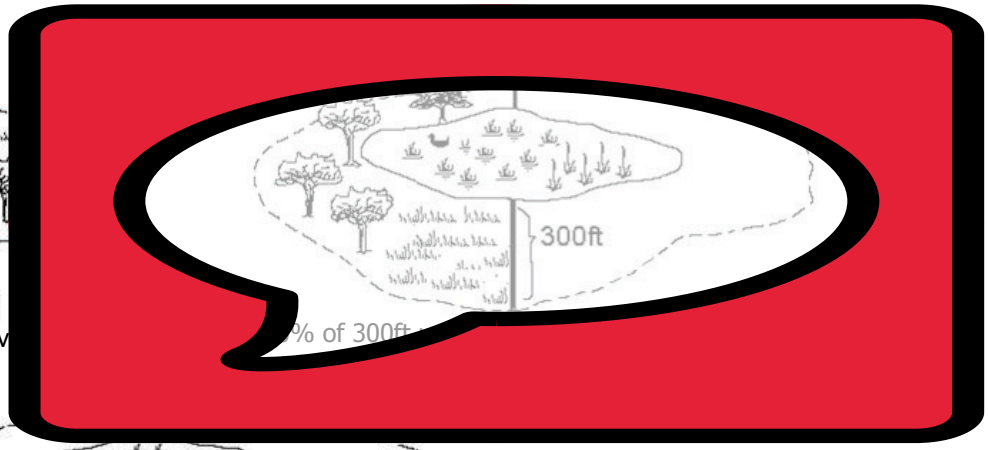
5. Surrounding Vegetation (Maximum of 10 Points):

How much of the area surrounding the wetland is "naturally vegetated"?

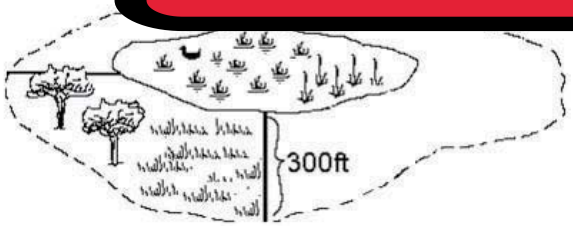
"Naturally vegetated" means no pavement, buildings, lawns, bare soil, tilled soil, bedrock, or heavily-grazed pasture. Lightly-grazed or infrequently-mowed pasture is OK (mowed fewer than 4 times a year). Vegetation does not need to consist of native species.

*Circle the diagram below that best describes the **surrounding vegetation** of your wetland. If more than one diagram applies choose the one with the higher point score.* ***If none apply, give the wetland a 0.*** Maps and aerial photographs available online or at the counter of the Planning Department can assist you in answering this question.

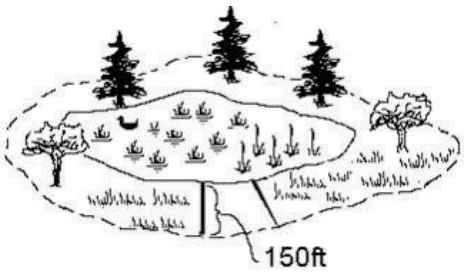
95% of 300ft upland area is naturally v
10 points



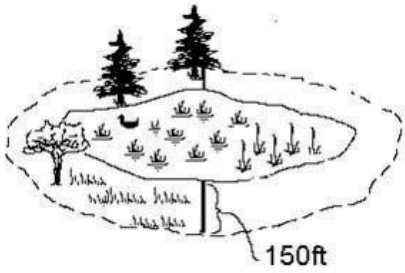
% of 300ft



25% of 300ft upland area is naturally vegetated:
6 points

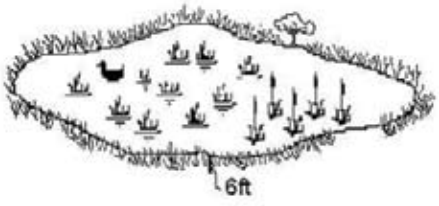


95% of 150ft upland area is naturally vegetated: 8 points



50% of 150ft upland area is naturally vegetated: 6 points

95% of 80ft upland area is naturally vegetated: 4 points



95% of 6ft upland area is naturally vegetated: 1 point

Insert the point value here (Maximum of 10 points): 8

6. Large Woodlands (Maximum of 10 Points):

"Woodlands" are areas of trees or shrubs.
"Connected to" includes areas that are separated from each other or from the wetland by distances less than 100 ft. Include wooded areas within the wetland when summing the acreage.

a. How much woodland is connected to your wetland? *Ignore all Roads*

More than 100 acres (5 points) 5
Greater than 9 to 100 acres (3 points) _____
From 1 to 9 acres (1 point) _____
None of the above/any other condition (0 points) _____

b. Assess this again, but this time consider roads as a disconnection. *Roads don't include private driveways.*

More than 100 acres (5 points) 5
Greater than 9 to 100 acres (3 points) _____
From 1 to 9 acres (1 point) _____
None of the above/any other condition (0 points) _____

The above two questions can be answered most easily by consulting maps and aerial photographs at the Planning Department.

Add up the points from (a) and (b) and insert here (maximum of 10 points): 10

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7. Distance to Lake or Saltwater (maximum of 5 points):

How far is this wetland from the nearest lake or saltwater area? *Select only the one condition with the highest score.*

___ Within 300 ft (5 points)
3 Between 300 ft and ½ mile (3 points)
___ More than ½ mile (0 points)

This can be answered most easily by consulting maps and aerial photographs at the Planning Department

Insert the point value here (Maximum of 5 points): 3

8. Nearby Wetlands (maximum of 5 points):

How many other County-mapped wetlands are within ½ mile of your wetland? This can be answered most easily by consulting maps and aerial photographs at the Planning Department. Insert the points on the line next to the one condition that gives the highest applicable points.

☐ three or more, and **none** are separated from this wetland by paved roads, lawns, bare soil, tilled soil, or heavily-grazed pasture (5 points)
☑ three or more, but **some** are separated from this wetland by paved roads, lawns, bare soil, tilled soil, or heavily-grazed pasture (4 points)
☐ one or two, and **none** are separated from this wetland by paved roads, lawns, bare soil, tilled soil, or heavily-grazed pasture (3 points)
☐ one or two, but **some** are separated from this wetland by paved roads, lawns, bare soil, tilled soil, or heavily-grazed pasture (1 point)
☐ none (0 points)

Insert the point value here (Maximum of 5 points): 4

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9. Water Persistence and Pattern (maximum of 6 points):

Check and complete the section that describes your wetland in a normal year. Then add the additional points immediately beneath it if applicable.

More than 10% of wetland (or more than ¼ acre) contains more than 4 inches of standing water during the **entire year**. (4 points)
Add 2 points if:
☐ Water is mostly scattered throughout the wetland in multiple patches and most of it floods herbs, grasses, or the thin stems of shrubs during the growing season.

More than 10% of wetland (or more than ¼ acre) contains more than 4 inches of standing water for **part of the year, but not year-round**. (2 points)
Add 1 point if:
☐ Water is mostly scattered throughout the wetland and most of it floods herbs, grasses, or thin stems of shrubs during the growing season.

Other. (0 points)

Insert the total point value here (Maximum of 6 points): 0

Now add the points from questions 2 through 9 and record the total HERE: 33. This is your Habitat Score.

Are the points 22 or greater?

☑ Yes. Answer the Wetland Outlet question below and proceed to *Table 2 below to make a preliminary determination of the width of the buffer that may be recommended for a new Development Proposal. You are then done with this assessment.*

☐ No. Answer the Wetland Outlet question below and proceed to question #**10**.

Wetland Outlet?

An outlet is a location where there is visible evidence of the discharge of surface water from a wetland at any season of the year. Although the presence or lack of an outlet does not affect habitat directly, wetlands without outlets tend to be more sensitive because any pollution that reaches them becomes confined and is not diluted significantly. If the presence of an outlet is unclear or uncertain, the wetland should be presumed to not have an outlet.

Does the wetland have an outlet? *Select one:*

☐ No
☑ Yes

Table 2

Intensity Level (Land Use Intensity Worksheet)	**Wetland Outlet**	**Habitat Score** (Wetland Buffer Worksheet)			
		40 or higher	**32-39**	**29-31**	**22-28**
Low	Yes	125 ft	75 ft	75 ft	75 ft
	No	150 ft	125 ft	100 ft	75 ft
Moderate	Yes	200 ft	110 ft	110 ft	110 ft
	No	225 ft	175 ft	150 ft	110 ft
High	Yes	250 ft	150 ft	150 ft	150 ft
	No	300 ft	200 ft	175 ft	150 ft