



J. S. Jones and Associates, Inc.

Critical Area Assessment

of

*King County Tax Parcel No. 362205-9049
Southeast Quarter of Section 36, Township 22 N, Range 6 E*

*Prepared for:
Darbara & Parmi Singh
Parmi257@gmail.com*

*c/o Tizzy Wong
tizzywong@aol.com
253-232-5342*

*Dated:
November 21, 2023*

*Prepared by:
Jeffery S. Jones, Wetland Scientist*

Contents

1.0 Project Description.....	1
2.0 Parcel Identification No. and Abbreviated Legal Description.....	1
3.0 Methodology	1
4.0 Results and Discussion	2
5.0 Summary of Critical Areas	2
6.0 Impacts	2
7.0 Authority	2
8.0 Limitations	2
9.0 Literature Citations	3

Attachments

Google Map & Directions
Critical Area Sketch
USDA NRCS Web Soil Survey
DNR FPARS Map
PHS Online Report
WNHP Rare Plants and Ecosystems Map
Routine Data Sheets
Site Photos

1.0 Project Description

The applicant requests approval of the CAD to construct a metal building with additional driveway surfaces. The property is 8.25 acres with an existing single-family residence and several sheds. The zone is RA5SO.

2.0 Parcel Identification No. and Abbreviated Legal Description

The parcel is located at 17411 S.E. Covington-Sawyer Road, Covington, WA, see the attached google map. The King County tax parcel number is 362205-9049. The subject study area is in the Southeast quarter of Section 36, Township 22 North, Range 5 East, of the Willamette Meridian.

The subject property has an abbreviated legal description as follows:

POR OF NW 1/4 OF SE 1/4 & OF N 330 FT OF SW 1/4 OF SE 1/4 LY SLY OF SE 284TH ST & LY WLY OF LN BEG 489.46 FT E FR SW COR OF SD N 330 FT TH N 08-34-50 E 414.62 FT TH S 64-00-58 E 160.63 FT TH N 27-31-02 E 223 FT M/L TO SLY LN OF SD ST LESS POR LY NLY & WLY OF LN DAF BEG AT SW COR OF SD NW 1/4 OF SE 1/4 TH N 00-15-46 E ALG W LN OF SD SUBD 104.01 FT TO TPOB TH N 60-17-34 E 173.93 FT TH ALG RGT CURVE RAD 210 FT AN ARC DIST OF 86.13 FT TH ALG RGT CURVE RAD 670 FT AN ARC DIST OF 20.94 FT TH N 03-53-18 E 189.25 FT TO TERMINUS OF SD LN AT SLY LN OF SD ST

3.0 Methodology

The wetland assessment and delineation were performed using the U.S. Army Corps of Engineers “Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coastal Region, Version 2.0” (COE. 2010). The Routine Determination method was used. Wetlands are rated with the Washington State Department of Ecology 2014 wetland rating methodology (Hruby, 2014).

The critical area delineation and data collection was performed on July 18, 2023. The weather was sunny and 75° F. The wetland scientist was Jeffery S. Jones. There is one boundary flag sequence flags A-1 through A-12, and three sample locations labeled SL-1 through SL-3, see the attached Site Plan. The wetland boundary flags are preprinted “Wetland Boundary.”

4.0 Results and Discussion

There are no wetlands or streams onsite. The soils are Alderwood gravelly sandy loam and Everett very gravelly sandy loam, see the attached Routine Wetland Determination Forms and the Critical Area Sketch. The soils profiles were dry. The plant community is dominated by unidentified grasses and weeds, Himalayan blackberry (*Rubus armeniacus*), Douglas fir (*Pseudotsuga menziesii*), and big-leaf maple (*Acer macrophyllum*). There are no depressions or drainage patterns on or near the site.

Jenkins Creek is located hundreds of feet north of Covington-Sawyer Road, see the attached DNR FPARS Map. The creek has adjacent wetlands. However, critical area buffers do not extend across a paved public right-of-way, so these critical areas and their buffers are not relevant to the subject property.

There is an offsite suspect wetland which at its closest is approximately 310 feet southwest of the southwest property corner. The wetland was not rated because it is clearly more than 225 feet from the subject property. The location of this offsite wetland is shown on the attached Critical Area Sketch

King County iMap shows some areas of steep slopes onsite, see the attached Critical Areas Sketch. Steep slopes are outside of the scope of this study.

There are no priority habitats or species identified on or near the subject parcel, see the attached PHS report. There are no rare plants or ecosystems identified on or near the subject parcel, see the attached DNR Rare Plants & Ecosystems Map.

5.0 Summary of Critical Areas

There are no wetlands or streams onsite or within 225 feet of the subject property. There is an offsite wetland approximately 310 feet southwest of the southwest property corner. There are areas of steep slopes onsite.

6.0 Impacts

No impacts to wetlands, streams or their associated buffers are proposed. Steep slopes are not within the scope of this study.

7.0 Authority

This determination is in accordance with Section 404 of the Clean Water Act and is a requirement of the King County Department of Permitting and Environmental Review (DPER).

8.0 Limitations

Critical area determinations and delineations are not final until approved by regulatory agencies and/or local jurisdictions. *J. S. Jones and Associates, Inc.* does not guarantee acceptance or approval by regulatory agencies, or that any intended use will be achieved.

9.0 Literature Citations

COE. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-10-3. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

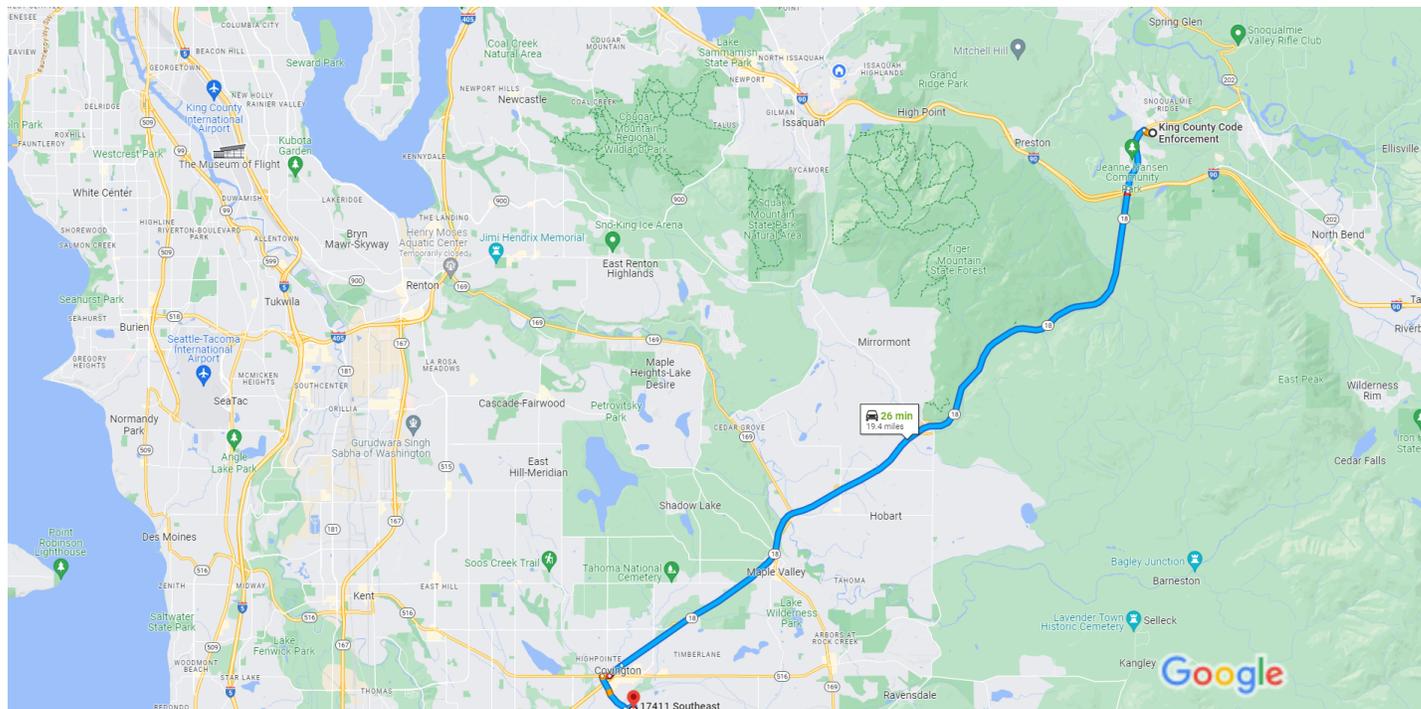
DOE. 1997. Washington State Wetlands Identification and Delineation Manual. Publ. # 96-94. Washington D.C.

Hruby T. 2014. Washington State Wetland Rating System for Western Washington: 2014 Update (Publication #14-06-029). Olympia, Washington: Washington Department of Ecology.

Attachments



King County Code Enforcement, 35030 SE Douglas Drive 19.4 miles, 26 min
St, Snoqualmie, WA 98065 to 17411 SE Covington Sawyer Rd, Kent, WA 98042



Map data ©2023 Google 1 mi

King County Code Enforcement

35030 SE Douglas St, Snoqualmie, WA 98065

↑ 1. Head northwest on SE Douglas St
1 min (0.2 mi)

Take WA-18 W to Covington Way SE in Covington

23 min (18.1 mi)

↶ 2. Turn left onto Snoqualmie Pkwy
1.4 mi

↑ 3. Continue onto Echo Glen Rd
351 ft

↑ 4. Continue onto WA-18 W
16.1 mi

↷ 5. Take the WA-516/SE 272nd St exit toward Covington
0.3 mi

↷ 6. Use the left lane to turn right onto WA-516 W/SE 272nd St
0.2 mi

Continue on Covington Way SE. Drive to SE Covington Sawyer Rd in Lake Morton-Berrydale

↩ 7. Turn left onto Covington Way SE 3 min (1.1 mi)

_____ 0.9 mi

↑ 8. Continue onto SE Covington Sawyer Rd

_____ 0.2 mi

17411 SE Covington Sawyer Rd
Kent, WA 98042

Critical Area Sketch



Legend

- Address points
- Address labels
- Parcels
- index contours - 100 foot
- contours - 5 foot (below 1000 feet) and 10 foot
- Potential steep slope hazard areas (2016, see explanation-->)
- Seismic hazard (1990 SAO)
- Coal mine hazard (1990 SAO)
- Stream (1990 SAO)**
 - class 1
 - class 2 perennial
 - class 2 salmonid
 - class 3
 - ... unclassified
- Wetland (1990 SAO)

The information included on this map has been compiled by King County staff from a variety of sources and is subject to change without notice. King County makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a survey product. King County shall not be liable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of the information contained on this map. Any sale of this map or information on this map is prohibited except by written permission of King County.

Date: 11/20/2023

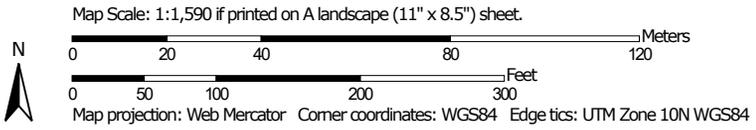
Notes:



King County

King County, EagleView Technologies, Inc.

Soil Map—King County Area, Washington



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: King County Area, Washington

Survey Area Data: Version 19, Aug 29, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

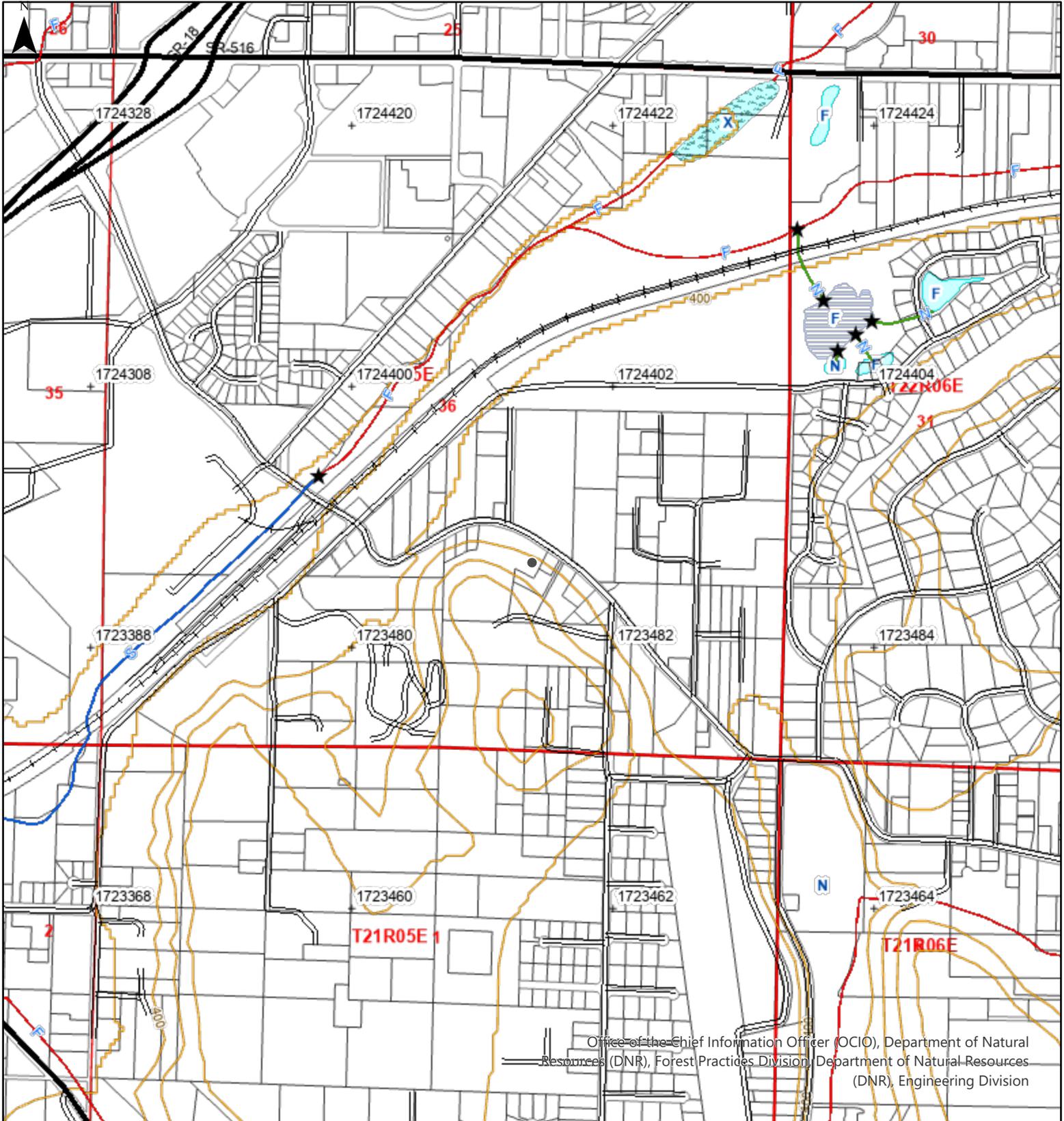
Date(s) aerial images were photographed: Jul 31, 2022—Aug 8, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AgC	Alderwood gravelly sandy loam, 8 to 15 percent slopes	0.0	0.0%
AgD	Alderwood gravelly sandy loam, 15 to 30 percent slopes	5.8	52.3%
EvB	Everett very gravelly sandy loam, 0 to 8 percent slopes	5.3	47.7%
Totals for Area of Interest		11.1	100.0%

Forest Practices Activity Map - Application



Office of the Chief Information Officer (OCIO), Department of Natural Resources (DNR), Forest Practices Division, Department of Natural Resources (DNR), Engineering Division

Map Symbols

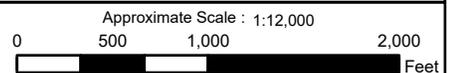
- Harvest Boundary
- - - Road Construction
- ~ Stream
- ▨ RMZ / WMZ Buffers
- ⊗ Rock Pit
- ⊙ Landing
- ▽ Waste Area
- 🌲 Clumped WRTS/GRTS
- 🏠 Existing Structure

Additional Information

Extreme care was used during the compilation of this map to ensure its accuracy. However, due to changes in data and the need to rely on outside information, the Department of Natural Resources cannot accept responsibility for errors or omissions, and therefore, there are no warranties that accompany this material.

Legal Description

S02 T21.0N R05.0E, S01 T21.0N R05.0E, S35 T22.0N R05.0E, S31 T22.0N R06.0E, S30 T22.0N R06.0E, S25 T22.0N R05.0E, S36 T22.0N R05.0E, S26 T22.0N R05.0E, S06 T21.0N R06.0E



Date: 11/21/2023 Time: 10:34 AM



Priority Habitats and Species on the Web



Buffer radius: 1200 Feet

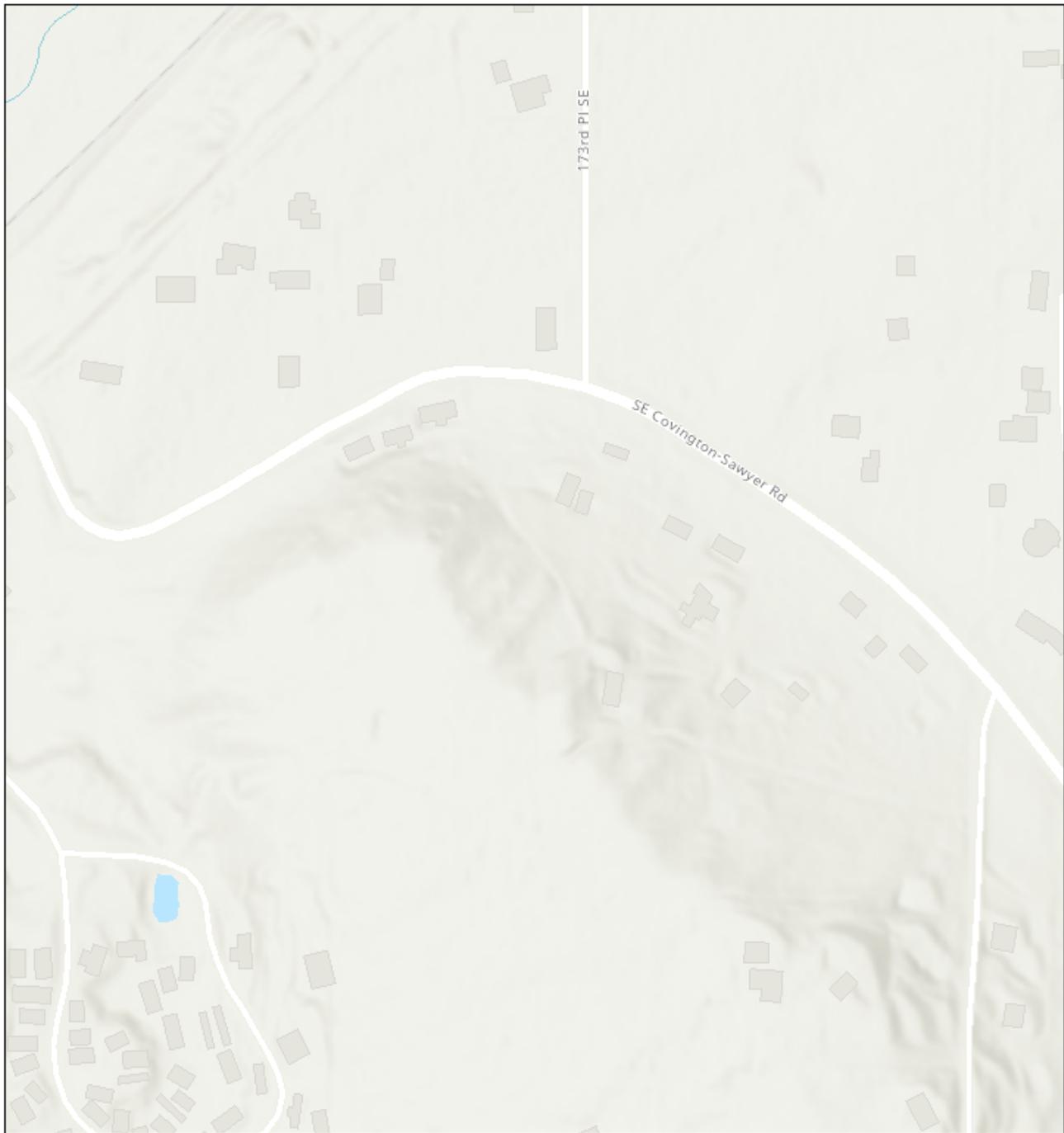
Report Date: 11/15/2023

The Priority Habitats and Species (PHS) datasets do not contain information for your project area. This does not mean that species and habitats do not occur in your project area. PHS data, points, lines and polygons are mapped only when occurrences of these species or habitats have been observed in the field. Unfortunately, we have not been able to comprehensively survey all sections in the state and therefore, it is important to note that priority species and habitats may occur in areas not currently known to the Department.

DISCLAIMER. This report includes information that the Washington Department of Fish and Wildlife (WDFW) maintains in a central computer database. It is not an attempt to provide you with an official agency response as to the impacts of your project on fish and wildlife. This information only documents the location of fish and wildlife resources to the best of our knowledge. It is not a complete inventory and it is important to note that fish and wildlife resources may occur in areas not currently known to WDFW biologists, or in areas for which comprehensive

surveys have not been conducted. Site specific surveys are frequently necessary to rule out the presence of priority resources. Locations of fish and wildlife resources are subject to variation caused by disturbance, changes in season and weather, and other factors. WDFW does not recommend using reports more than six months old.

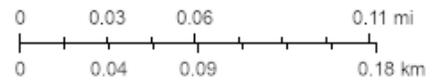
WNHP Rare Plant and Ecosystem Locations



11/15/2023, 1:50:40 PM

1:5,019

-  Public Land Survey Sections
-  Public Land Survey Townships
-  State Boundary
-  County Boundaries



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodastystreisen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, Esri Community Maps Contributors, King County, WA State Parks GIS, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of

WNHP Plant & Ecosystem Map Viewer

KNOWN PLANT AND ECOSYSTEM LOCATIONS REFLECT KNOWN OCCURRENCE LOCATIONS BUT MAY NOT REFLECT ALL OCCURRENCES OF RARE PLANTS OR ECOSYSTEMS.

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

Project/Site: 17411 SE Coumington Sawyer City/County: King Sampling Date: 11/16/23
 Applicant/Owner: Dabara & Parni Singh State: WA Sampling Point: SL-1
 Investigator(s): Jeffery Jones Section, Township, Range: S36, T22N, R5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 5
 Subregion (LRR): NW Forests & Coasts Lat: 47.34813 Long: -122.11085 Datum: NAUD83
 Soil Map Unit Name: Everett very gravelly sandy loam NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes _____	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			
Remarks:					

VEGETATION – Use scientific names of plants.

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

SOIL

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	7.5YR	2.5/2					vg rsl	
5-18+	7.5YR	4/3					vg rsl	

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

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

Field Observations:

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

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

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

Wetland Hydrology Present? Yes _____ No

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

Remarks: Dry

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

Project/Site: 17411 SE Coonington-Sawyer City/County: King Sampling Date: 11/16/23
 Applicant/Owner: Dabara & Parmi Singh State: WA Sampling Point: SL-2
 Investigator(s): Jeffery Jones Section, Township, Range: S36, T22N, R5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 20
 Subregion (LRR): NW Forests & Coasts Lat: 47.34765 Long: -122.11063 Datum: NAUD83
 Soil Map Unit Name: Alderwood gravelly sandy loam NWI classification: —
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Remarks:			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>10 m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____				Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____				Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
4. _____				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)
<u>0</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>5 m</u>)				
1. _____				Prevalence Index = B/A = _____ Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 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.
2. _____				
3. _____				
4. _____				
5. _____				
<u>0</u> = Total Cover				
Herb Stratum (Plot size: <u>3 m</u>)				
1. <u>Unidentified grasses</u>	<u>60</u>	<u>yes</u>	<u>FAC</u>	Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
2. <u>Taraxacum officinale</u>	<u>10</u>	<u>yes</u>	<u>FACU</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
<u>70</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____				
2. _____				
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>30</u>				
Remarks:				

SOIL

Sampling Point: SL-2

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
<u>0-4</u>	<u>10YR 2/2</u>	<u>100</u>					<u>grs!</u>	
<u>4-18+</u>	<u>10YR 3/4</u>	<u>100</u>					<u>grs!</u>	

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

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

Field Observations:

Surface Water Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Water Table Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? (includes capillary fringe) Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	

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

Remarks: Dry

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

Project/Site: 17411 SE Loungton Sawyer City/County: King Sampling Date: 11/16/23
 Applicant/Owner: Dabara & Perm. Smth State: WA Sampling Point: 56-3
 Investigator(s): Jeffery Jones Section, Township, Range: 536, T22N, R5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 10
 Subregion (LRR): NW Forests & Coasts Lat: 47.34671 Long: -122.11237 Datum: NAVD83
 Soil Map Unit Name: Alderwood gravelly sandy loam NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>		

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>10m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
1. <u>Acer macrophyllum</u>	<u>5</u>	<u>yes</u>	<u>FACU</u>	
2. _____				
3. _____				
4. _____				
Sapling/Shrub Stratum (Plot size: <u>5m</u>)				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
Herb Stratum (Plot size: <u>3m</u>)				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 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.
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
Woody Vine Stratum (Plot size: <u>1m</u>)				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>
1. <u>Rubus armeniacus</u>	<u>80</u>	<u>yes</u>	<u>FACU</u>	
2. _____				
% Bare Ground in Herb Stratum <u>20</u>				

Remarks:

SOIL

Sampling Point: SL-3

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	10YR 2/2	100					grs/	
8-18"	10YR 4/3	100					grs/	

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	

Field Observations:

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

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

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

Wetland Hydrology Present? Yes _____ No

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

Remarks: Dry

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

Project/Site: 17411 SE Covington Sawyer City/County: King Sampling Date: 11/16/23
 Applicant/Owner: Dabara & Parm Singh State: WA Sampling Point: SL-4
 Investigator(s): Jeffery Jones Section, Township, Range: 536, T22N, R5E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 5
 Subregion (LRR): NW Forests & Coasts Lat: 47.34645 Long: -122.11070 Datum: NAVD83
 Soil Map Unit Name: Alderwood gravelly sandy loam NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Hydic Soil Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>		

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>10 m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:																																																
1. <u>Pseudotsuga menziesii</u>	<u>25</u>	<u>yes</u>	<u>FACU</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)																																																
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)																																																
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67</u> (A/B)																																																
4. _____	_____	_____	_____	Prevalence Index worksheet:																																																
<table border="0"> <tr> <td>Sapling/Shrub Stratum (Plot size: <u>5 m</u>)</td> <td><u>25</u></td> <td>= Total Cover</td> <td></td> </tr> <tr> <td>1. _____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>2. _____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>3. _____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>4. _____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>5. _____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> </table>					Sapling/Shrub Stratum (Plot size: <u>5 m</u>)	<u>25</u>	= Total Cover		1. _____	_____	_____	_____	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	5. _____	_____	_____	_____																								
Sapling/Shrub Stratum (Plot size: <u>5 m</u>)	<u>25</u>	= Total Cover																																																		
1. _____	_____	_____	_____																																																	
2. _____	_____	_____	_____																																																	
3. _____	_____	_____	_____																																																	
4. _____	_____	_____	_____																																																	
5. _____	_____	_____	_____																																																	
<table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> <td></td> <td></td> </tr> <tr> <td>OBL species _____</td> <td>x 1 = _____</td> <td></td> <td></td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> <td></td> <td></td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> <td></td> <td></td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> <td></td> <td></td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> <td></td> <td></td> </tr> <tr> <td>Column Totals: _____</td> <td>(A) _____</td> <td>(B) _____</td> <td></td> </tr> <tr> <td colspan="4">Prevalence Index = B/A = _____</td> </tr> </table>				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 = _____																				
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 = _____																																																				
<table border="0"> <tr> <td>Herb Stratum (Plot size: <u>3 m</u>)</td> <td><u>0</u></td> <td>= Total Cover</td> <td></td> </tr> <tr> <td>1. <u>Unidentified grasses</u></td> <td><u>25</u></td> <td><u>yes</u></td> <td><u>FAC</u></td> </tr> <tr> <td>2. _____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>3. _____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>4. _____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>5. _____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>6. _____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>7. _____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>8. _____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>9. _____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>10. _____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>11. _____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> </table>				Herb Stratum (Plot size: <u>3 m</u>)	<u>0</u>	= Total Cover		1. <u>Unidentified grasses</u>	<u>25</u>	<u>yes</u>	<u>FAC</u>	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	5. _____	_____	_____	_____	6. _____	_____	_____	_____	7. _____	_____	_____	_____	8. _____	_____	_____	_____	9. _____	_____	_____	_____	10. _____	_____	_____	_____	11. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 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.
Herb Stratum (Plot size: <u>3 m</u>)	<u>0</u>	= Total Cover																																																		
1. <u>Unidentified grasses</u>	<u>25</u>	<u>yes</u>	<u>FAC</u>																																																	
2. _____	_____	_____	_____																																																	
3. _____	_____	_____	_____																																																	
4. _____	_____	_____	_____																																																	
5. _____	_____	_____	_____																																																	
6. _____	_____	_____	_____																																																	
7. _____	_____	_____	_____																																																	
8. _____	_____	_____	_____																																																	
9. _____	_____	_____	_____																																																	
10. _____	_____	_____	_____																																																	
11. _____	_____	_____	_____																																																	
<table border="0"> <tr> <td>Woody Vine Stratum (Plot size: <u>1 m</u>)</td> <td><u>25</u></td> <td>= Total Cover</td> <td></td> </tr> <tr> <td>1. <u>Rubus armeniacus</u></td> <td><u>30</u></td> <td><u>yes</u></td> <td><u>FAC</u></td> </tr> <tr> <td>2. _____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td colspan="4"> <table border="0"> <tr> <td>% Bare Ground in Herb Stratum <u>75</u></td> <td><u>30</u></td> <td>= Total Cover</td> <td></td> </tr> </table> </td> </tr> </table>				Woody Vine Stratum (Plot size: <u>1 m</u>)	<u>25</u>	= Total Cover		1. <u>Rubus armeniacus</u>	<u>30</u>	<u>yes</u>	<u>FAC</u>	2. _____	_____	_____	_____	<table border="0"> <tr> <td>% Bare Ground in Herb Stratum <u>75</u></td> <td><u>30</u></td> <td>= Total Cover</td> <td></td> </tr> </table>				% Bare Ground in Herb Stratum <u>75</u>	<u>30</u>	= Total Cover		Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____																												
Woody Vine Stratum (Plot size: <u>1 m</u>)	<u>25</u>	= Total Cover																																																		
1. <u>Rubus armeniacus</u>	<u>30</u>	<u>yes</u>	<u>FAC</u>																																																	
2. _____	_____	_____	_____																																																	
<table border="0"> <tr> <td>% Bare Ground in Herb Stratum <u>75</u></td> <td><u>30</u></td> <td>= Total Cover</td> <td></td> </tr> </table>				% Bare Ground in Herb Stratum <u>75</u>	<u>30</u>	= Total Cover																																														
% Bare Ground in Herb Stratum <u>75</u>	<u>30</u>	= Total Cover																																																		

Remarks: Assume grass is FAC

SOIL

Sampling Point: SL-4

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
<u>0-4</u>	<u>10YR 2/2</u>	<u>100</u>					<u>grsl</u>	
<u>4-18+</u>	<u>10YR 4/3</u>	<u>100</u>					<u>grsl</u>	

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

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

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

Indicators for Problematic Hydric Soils³:

³Indicators 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 ✓

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

Field Observations:

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

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

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

Wetland Hydrology Present? Yes _____ No ✓

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

Remarks: Dry



Existing Single-Family Residence



Sample Location 1 (SL-1)



Area Around SL-1



SL-2



SL-3



Area Around SL-3



SL-4



Area Around SL-4