

February 13, 2023

Mr. Mike Pruett Segale Properties P.O. Box 88028 Tukwila WA 98138

RE: Segale Properties Cumberland Ownership – Critical Areas Investigation R.A.I. Project #2019-105-002

Per your request, Raedeke Associates, Inc. staff visited the 16 separate boring sites on the Segale Properties Cumberland project site on December 3 and December 10, 2019. We also visited the site on April 22 and May 14, 2021, and again on June 21, 2022, to evaluate the property for environmentally sensitive areas and review the proposed road alignment for potential conflict with wetlands, streams or their buffers. This report provides a summary of our findings regarding critical areas and is intended for project planning purposes.

PROPERTY LOCATION

The Segale Properties Cumberland project site consists of an approximately 1,000-acre assemblage located north of Cumberland and south of the Green River in unincorporated King County, Washington. The project site consists of 8 different parcels spread across Sections 9, 15, 17, and 21 of Township 21 North, Range 7 East. The project site includes King County Tax Parcel Nos. 1721079001, 0921079001, 1521079008, 1521079009, 2121079006, 2121079029, 2121079009, and 2121079005. Parcel maps retrieved on-line from King County depict the property boundaries. Figure 1 depicts the study area discussed in this report.

Nearby land uses include King County Department of Natural Resources (KCDNR) forestland to the west and north of the site, single-family residences and small businesses to the south of the site, and Cumberland-Kanaskat Rd SE to the east. Any offsite critical areas or their preliminary buffers do not extend onto the project site or are interrupted by developed roads.

METHODOLOGY

Wetlands and streams are protected by federal law as well as by state and local regulations. Federal law (Section 404 of the Clean Water Act) prohibits the discharge of

dredged or fill material into "Waters of the United States," including certain wetlands, without a permit from the U.S. Army Corps of Engineers (COE 2022). The COE makes the final determination whether an area meets the definition of a wetland and whether the wetland is under their jurisdiction.

The COE wetland definition was used to determine if any portions of the project area could be classified as wetland. A wetland is defined as an area "inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (Federal Register 1986:41251).

We based our investigation upon the guidelines of the U. S. Army Corps of Engineers (COE) Wetlands Delineation Manual (Environmental Laboratory 1987) and subsequent amendments and clarifications provided by the COE (1991a, 1991b, 1992, 1994), as updated for this area by the regional supplement to the COE wetland delineation manual for the Western Mountains, Valleys, and Coast Region (COE 2010). The COE wetlands manual is required by state law (WAC 173-22-035, as revised) for all local jurisdictions, including unincorporated King County.

During the December 2019 field investigations, we surveyed the areas within 200 feet of all proposed geological test pit locations. During our April and May 2021 field investigations, field staff conducted transects approximately 50 feet apart throughout the project area to investigate for the presence of wetlands, streams, or fish and wildlife habitat. Due to the large and generally homogeneous nature of the site, formal sample plots were limited to the areas identified for test pits and areas where conditions differed noticeably from the typical vegetation community. General descriptions of site conditions were made during each transect to document the site conditions. During our June 2022 field visit, we surveyed a 300 feet radius within proximity of the proposed road alignment in the eastern portion of the project site.

BACKGROUND REVIEW

Prior to conducting our site visit, we reviewed existing background maps and information for the project site from the U.S.D.A. Natural Resource Conservation Service (NRCS 2019) Web Soil Survey, the U.S. Fish and Wildlife (USFWS 2019) National Wetland Inventory (NWI), King County (2023a) iMap, Washington Department of Fish and Wildlife (2019) PHS database, and the WDFW Salmonscape (2019) in order to assist in our determination of whether wetlands were present within the property or its vicinity. We also reviewed current and historical aerial photographs (Google Earth 2019) to assist in the definition of existing plant communities, drainage patterns, and land use.

The USDA NRCS (2019) Web Soil Survey identifies Barneston soil series in most of the study area. Barneston soils derive from a volcanic ash mixed with loess over sandy or gravelly glacial outwash and are classified as somewhat excessively drained. Although the Barneston soil series is not listed as a hydric soil on either the state or national hydric soils list, it may contain the following potential hydric soil inclusions: Norma soils (NRCS 2019; U.S.D.A. Soil Conservation Service 1991, Federal Register 1995). Additionally, the Web Soil Survey identifies Arents soil series in a small portion of the southwest corner of the project site. Arents soils derive from volcanic ash and glacial drift and are classified as well drained. The Arents soil series is not listed as a hydric soil on either the state or national hydric soils list, though it may contain the following potential hydric soil inclusions: Norma, undrained (NRCS 2019; U.S.D.A. Soil Conservation Service 1991, Federal Register 1995). In the eastern portion of the project site, the Web Soil Series identifies the presence of Beausite soil series. Beausite soils are well drained and have a parent material of glacial till and colluvium derived from sandstone. Soil boundaries or mapping units are mapped from aerial photographs with limited field verification. Thus, the location and extent of boundaries between mapping units may not be accurate for a given parcel of land within the survey area.

The USFWS (2019) NWI depicts an unnamed stream originating from the northwest slopes of the offsite portion of the 1,474-foot-high summit on the DNR parcel in Section 16, also known as Lizard Mountain. This wetland is classified as an unknown perennial, unconsolidated bottom, permanently flooded riverine system. This feature is mapped as flowing southwest through the DNR parcel and crossing the project area on parcel 2121079006 (Figure 2). While the Washington Department of Fish and Wildlife (WDFW 2019) Salmonscape map also depicts this stream, the King County (2023a) iMap does not identify this stream.

The Green River, which lies outside the project site to the north and west, is identified by the NWI as a riverine wetland. The NWI also depicts several small tributaries to the Green River, including two on the western edge of the project area. Wetlands shown on the NWI are general in terms of location and extent, as they are determined primarily from aerial photograph interpretation. Thus, the number and extent of existing wetlands within the project area may differ from those marked on an NWI map. The King County (2023a) iMap does not depict any other streams or wetlands on or within the vicinity of the project site.

EXISTING CONDITIONS

During our December 3 and December 10, 2019, site visits, we did not identify any wetlands or streams on or within 200 feet of the 16 proposed drilling sites throughout the project site. During our April and May 2021 field visits, we surveyed the remainder of the project site and did not identify any wetlands. We identified one stream (Stream 1)

on the northern portion of Section 21, in the central portion of the study area. During our June 21, 2022 site visit, we did not identify any wetlands or streams on or within 300 feet of the proposed road access from Cumberland-Kanaskat Rd SE (Figure 3). The site contains upland second-growth Douglas Fir - Hemlock forest, former logging roads, and one observed outbuilding on the southwestern edge.

Vegetation throughout the site is dominated by a second-growth upland forest community. The canopy is dominated by Douglas fir (*Pseudotsuga menziesii*, FACU) and western hemlock (*Tsuga heterophylla*, FACU), with some areas of western arborvitae (*Thuja plicata*, FAC). The understory primarily consists of vine maple (*Acer circinatum*, FAC), salal (*Gaultheria shallon* FACU), dull Oregon grape (*Mahonia nervosa*, FACU), and sword fern (*Polystichum munitum*, FACU) (See Sample Plots 1-21, Appendix A). Vegetation throughout the site is very homogeneous and consists primarily of second-growth forest with minor changes in topography and vegetation communities. Point 1,474 in the southeast portion of the site contains slopes ranging from 10-20% grade, with a similar Douglas Fir – Hemlock forest community.

Soils throughout the project site consist of up to 2 to 4 inches of black or very dark brown (10YR 2/1 and 10YR 2/2) sandy loams over up to 14 inches of brown, dark brown, or dark yellowish brown (10YR 3/3, 10YR 4/3, 10YR 4/4) gravelly sandy loams (see Sample Plots 1-9, 12, 13, 19, Appendix A).

During our site investigation, we noted a deep topographic depression immediately east of the proposed boring location 21B. It appears the site was excavated and possibly used as a former gravel borrow pit. The first 6 inches of soil consisted of a grayish brown (10YR 5/2) gravelly sandy loam. We encountered a restrictive layer and refusal of compacted gravel soils below a depth of 6 inches. No indicators of wetland hydrology or hydric soils were observed. Vegetation consisted of red alder (*Alnus rubra FAC*), Douglas fir, Douglas spiraea (*Spiraea douglasii FACW*), and Himalayan blackberry (*Rubus armeniacus FAC*) (Sample Plot 3, Figure 4).

We identified one stream (Stream 1) within the study area, in the northern portion of Section 21, approximately 400 feet northwest of the proposed location of boring 21C (Figure 5). Stream 1 is an ephemeral stream that flows off the northwest side of Lizard Mountain. Stream 1 is primarily fed by groundwater discharge and was dry at the time of our visit in May 2021. Stream 1 is characterized by a gravel bed and bank and infiltrates into permeable glacial outwash soils at the base of Lizard Mountain where the slope lessens. Stream 1 was not physically connected to any other aquatic areas or wetlands. Per King County (2023b) Code, the stream would likely be considered a Type O aquatic area. Type O aquatic areas outside of an Urban Growth Area are afforded a 25-foot buffer.

A draft hydrogeologic report prepared by Associated Earth Sciences, Inc (AESI, 2022) identified several additional ephemeral, groundwater-fed streams that originate on the slopes of Lizard Mountain. Due to the limited seasonal flow of these small stream segments and the porous nature of the glacial outwash soils, the streams do not have a well-defined bed or bank, which limited the ability to identify an ordinary high-water mark. During the 13-month period of hydrology monitoring conducted by AESI, flows ranged from 0.07 to 0.01 cubic feet per second (CFS), with measurable flow only occurring four times throughout the monitoring period.

The AESI (2022) draft report also identifies a small stream (Stream A) in the northwest portion of King County Parcel No. 0921079001. Stream A appears to be a spring-fed seasonal stream located at the northern edge of the project site, below a steep scarp. Our site visit to this portion of the site occurred in December 2019, when groundwater levels are typically low. Based on the absence of hydrology at Stream A during our site visit, it is likely ephemeral in nature. In addition, the onsite portion of Stream A also lacked a well-defined bed and bank, scouring, or other indicators of regular flow which limited the ability to identify an ordinary high-water mark of the channel during periods of low or no flow, such as during our investigation. Please refer to the AESI (2022) draft hydrogeologic report for complete mapping of all identified surface waters and water flow monitoring data.

During our December 3, 2019, December 10, 2019, April 22, 2021, May 14, 2021, and June 21, 2022 site investigations, we did not identify any wetlands on the properties. We did identify one Type O stream (Stream 1) in the northern portion of Section 21, approximately 400 feet northwest of the proposed location of boring 21C. AESI (2022) also identified several similar ephemeral streams on the flanks of Lizard Mountain that meet the criteria of Type O aquatic areas. Type O aquatic areas are afforded a 25-foot buffer per King County (2023b) Code. AESI (2022) identified a spring-fed stream (Stream A) in the northern portion of the project site. Because Stream A discharges to the Green River, it is classified as a Type N water, per King County (2023b) code. Type N waters outside the Urban Growth Area are provided a 65-foot buffer, per King County (2023b) code. As such, we do not anticipate any impacts to critical areas or associated buffers.

OFFSITE CRITICAL AREAS

During our April and May 2021 field visits, we investigated the KCDNR property to the north and west of the project site to search for any wetlands or streams. We identified seven wetlands on the KCDNR parcel (Figure 3). All wetlands were determined to consist of a depressional hydrogeomorphic (HGM) classification. The wetlands are

primarily forested with areas of scrub-shrub and emergent vegetation. Common species included red alder, Sitka spruce (*Picea sitchensis*, FACW), black cottonwood (*Populus trichocarpa*, FAC), salmonberry (*Rubus spectabilis*, FAC), Douglas spiraea, western lady fern (*Athyrium cylcosorum*, FAC), Pacific water parsley (*Oenanthe sarmentosa*, OBL) and slough sedge (*Carex obnupta*, OBL). Soils within the wetlands typically consisted of up to six inches of very dark silty and sandy loams underlain by depleted soil layers at least six inches deep with redoximorphic concentrations within the soil matrix.

The offsite wetlands consist primarily of palustrine forested (PFO) and palustrine scrubshrub (PSS) vegetation classes according to the USFWS wetland classification system (Cowardin et al. 1992). Areas of palustrine emergent (PEM) vegetation classes were also identified. The wetlands experience seasonal or occasional ponding, with hydrologic input primarily derived from upland sheetflow, shallow groundwater input, and direct precipitation.

Preliminary analysis of all offsite wetlands was prepared using the WDOE Wetland Rating form (Hruby, 2014). All seven offsite wetlands meet the criteria of Category III wetlands, with total scores ranging from 17 to 19 points (7 to 8 points for habitat). King County critical area code provides wetland buffers based on proposed impact. Mining is considered a high-impact use. Category III wetlands with habitat scores of 8 receive a 300-foot buffer when high impact activities are proposed. Category III wetlands with a habitat score of 7 receive a 150-foot buffer when high impact activities are proposed.

CONCLUSIONS

During our site investigation, we identified one Type O stream in the northern portion of Section 21. We did not observe any other wetlands, streams, or other sensitive areas, within the project site. In general, the project site contains second-growth forest dominated by 30- to 50-year-old Douglas-fir and Hemlock trees. We did not observe any other critical areas or fish and wildlife habitats on the project site.

Offsite to the north and west of the stream, we identified seven offsite wetlands on the KCDNR parcel. These wetlands are generally forested, with patches of scrub-shrub and emergent vegetation. Using the WDOE Wetland Rating form (Hruby, 2014), it was determined that all offsite wetlands meet the criteria of Category III wetlands because they scored between 17 to 19 points overall (7 to 8 points for habitat).

LIMITATIONS

We have prepared this report for the exclusive use of Segale Properties, and their consultants. No other person or agency may rely upon the information, analysis, or conclusions contained herein without permission from Segale Properties.

The determination of ecological system classifications, functions, values, and boundaries is an inexact science, and different individuals and agencies may reach different conclusions. With regard to wetlands, the final determination of their boundaries for regulatory purposes is the responsibility of the various agencies that regulate development activities in wetlands. We cannot guarantee the outcome of such agency determinations. Therefore, the conclusions of this report should be reviewed by the appropriate regulatory agencies prior to any detailed site planning or construction activities.

We warrant that the work performed conforms to standards generally accepted in our field and has been prepared substantially in accordance with then-current technical guidelines and criteria. The conclusions of this report represent the results of our analysis of the information provided by the project proponent and their consultants, together with information gathered in the course of the study. No other warranty, expressed or implied, is made.

If you have any questions or comments, or wish to discuss this issue further, please contact us at (206) 525-8122 or at <u>cwright@raedeke.com</u> or <u>wrussack@raedeke.com</u>.

Respectfully submitted,

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Cumberland Segale Figure 1. Regional & Vicinity Map

Date Created: 12 July, 2022

Note: Boundaries are approximate and for planning purposes only.

RAI Project #: 2019-105-002



2111 N. Northgate Way, Stc. 219Wetland ScienceSeattle, WA 98133Wildlife BiologyPhone 206-525-8122Landscape Architecture



FIGURE 2 - National Wetland Inventory Map Cumberland Segale Property



King County, WA RAI PROJECT: 2019-105-001 PREPARED: 1/20/2023 BY: WR



Image source: https://www.fws.gov/wetlands/data/mapper.html#





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Figure 4 - Sample Plot Locations Cumberland Segale Property

1/11/23 Note: Sample plot locations based on handheld GPS units and have not been surveyed. Boundaries are approximate and for planning purposes only.

Project no: 2019-105-002





Figure 5 - Identified Streams Cumberland Segale Property

 1/24/23
 Cumper Stress

 Note: Sample plot locations based on handheld GPS units and have not been surveyed.
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 Boundaries are approximate and for planning purposes only.
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Project no: 2019-105-002



ATTACHMENT A:

Data Forms

Project/Site: Cumberland Segale	City/County:	King County	Sampling Date: 12/3/19
Applicant/Owner: Segale		State: WA	Sampling Point: SP1
Investigator(s): Will Russack, Kolten Kosters	S	ection, Township, Range: <u>T.21N R.(</u>	07E S.21SW
Landform (hillslope, terrace, etc.): slope	Local relief	(concave, convex, none): <u>Convex</u>	Slope (%): <u>1-3</u>
Subregion (LRR): <u>NW Forest</u>	Lat: <u>47.2909</u>	Long: <u>-121.9303</u>	Datum: WGS 84
Soil Map Unit Name: Barneston gravelly ashy coarse sa	ndy loam	NWI classification	tion: <u>None</u>
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" pres	ent? Yes 🛛 No 🗌
Are Vegetation, Soil, or Hydrology r	naturally problematic?	(If needed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS – Attach site ma	ap showing sampling	point locations, transects,	important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes □ No ⊠ Yes □ No ⊠ Yes □ No ⊠	Is the Sampled Area within a Wetland?	Yes 🔲 No 🖾
Remarks: 21A test pit			

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>5 m</u>)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1. Acer macrophyllum (big-leaf maple)	50	<u>Y</u>	FACU	That Are OBL, FACW, or FAC: <u>3</u> (A)
2. Alnus rubra (red Alder)	<u>20</u>	<u>Y</u>	FAC	Total Number of Dominant
3. Pseudotsuga menziesii (Douglas fir)	10	Ν	FACU	Species Across All Strata: <u>6</u> (B)
4				Demonst of Deminorst Species
	80	= Total C	over	That Are OBL, FACW, or FAC: 50 (A/B)
Sapling/Shrub Stratum (Plot size: 3 m)				(* ,
1. Rubus ursinus (trailing blackberry)	30	<u>Y</u>	FACU	Prevalence Index worksheet:
2. Rubus armeniacus (Himalayan blackberry)	20	<u>Y</u>	FAC	Total % Cover of:Multiply by:
3. Cytisus scoparius (Scot's broom)	1	Ν	NL	OBL species $\underline{0}$ x 1 = $\underline{0}$
4				FACW species <u>0</u> x 2 = <u>0</u>
5				FAC species <u>70</u> x 3 = <u>210</u>
	51	= Total C	over	FACU species <u>140</u> x 4 = <u>560</u>
Herb Stratum (Plot size: <u>3 m</u>)				UPL species <u>0</u> x 5 = <u>0</u>
1. Dactylis glomerata (orchard-grass)	40	Y	FACU	Column Totals: <u>210</u> (A) <u>770</u> (B)
2. Agrostis capillaris (bentgrass)	<u>30</u>	Y	FAC	
3. Geranium robertianum (Robert geranium)	5	N	FACU	Prevalence Index = $B/A = 3.66$
4. Polystichum munitum (Sword fern)	5	Ν	FACU	Hydrophytic Vegetation Indicators:
5				1 - Rapid Test for Hydrophytic Vegetation
6.				2 - Dominance Test is >50%
7.				☐ 3 - Prevalence Index is ≤3.0 ¹
8.				4 - Morphological Adaptations ¹ (Provide supporting
9		·		data in Remarks or on a separate sheet)
10		·		5 - Wetland Non-Vascular Plants ¹
11		·		Problematic Hydrophytic Vegetation ¹ (Explain)
····	80	– Total C	over	¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 3 m)	00	- 101010	000	be present, unless disturbed or problematic.
1.				
2.				Hydrophytic Vegetation
		- Total C	over	Present? Yes \Box No \boxtimes
% Bare Ground in Herb Stratum <u>0</u>		- 101010		
Remarks:				

Sampling Point: SP1

(inches)	Color (moist)	%	Colo	or (moist)		%	Type ¹	Loc ²	Textur	e	Remarks	
<u>)-12</u>	10YR 2.5/3	100							<u>GR.S.L</u>	. <u> </u>		
ype: C=C	oncentration, D=De	pletion,	RM=Rec	luced Mat	rix, CS	=Covere	ed or Coat	ed Sand G	Frains.		ation: PL=Pore Lining, N	l=Matrix.
		Capie to		S, unesa		WISE 110	ieu.j					10 30115 .
] HISIUSUI] Histic Fr	(A1) Dipedon (A2)			Sanuy r.e Strinned N	00x (J Aatrix ((5) (56)				∠un RedF	MUCK (A10) Parent Material (TF2)	
1 Black Hi	stic (A3)			I namv Mi	ickv M	ineral (F	1) (excep	t MLRA 1)		Verv	Shallow Dark Surface (T	F12)
1 Hvdroge	en Sulfide (A4)			Loamy GI	eved N	Aatrix (F2	2)			Other	(Explain in Remarks)	12)
Depletec	d Below Dark Surfac	ce (A11)		Depleted	Matrix	(F3)	-,			-	(, ,	
] Thick Da	ark Surface (A12)	,		Redox Da	rk Sur	face (F6))		³ lr	dicator	s of hydrophytic vegetati	on and
] Sandy M	lucky Mineral (S1)			Depleted	Dark S	Surface (I	F7)			wetlar	nd hydrology must be pre	sent,
] Sandy G	leyed Matrix (S4)			Redox De	pressi	ons (F8)			-	unless	disturbed or problemation).
ostrictivo '	I aver (if present).											
Tune	Luyer (in present).											
Type:									L b colori	- C - ii I		
Type: Depth (in	ches):								Hydri	c Soil I	Present? Yes 🗌 No	
Type: Depth (in Remarks: No	ches):	Drs							Hydri	c Soil I	Present? Yes 🗌 No	
Type: Depth (in Remarks: No	ches):	Drs							Hydri	c Soil I	Present? Yes 🗌 No	
Type: Depth (in Remarks: No	ches):	Drs							Hydri	c Soil I	Present? Yes 🗌 No	
Type: Depth (in Remarks: No	ches): o hydric soil indicato								Hydri	c Soil I	Present? Yes 🗌 No	
Type: Depth (in Remarks: No	ches): o hydric soil indicato }Y drology Indicators	Drs							Hydri	c Soil I	Present? Yes 🗌 No	
Type: Depth (in Remarks: No DROLOG Vetland Hy	ches): o hydric soil indicato o hydric soil indicators o hydric soil indicators o hydric soil indicators cators (minimum of	Drs .: one requ		eck all that	t apply	()			Hydri	c Soil I	Present? Yes D No	e required)
Type: Depth (in Remarks: No DROLOG Vetland Hyp Primary India Surface V	ches): o hydric soil indicator 3Y drology Indicators <u>cators (minimum of</u> Water (A1)	ors :: one requ		eck all tha	t apply	/) ned Leav	/es (B9) (€	except ML	Hydri RA	c Soil I	Present? Yes D No	e required) (MLRA 1,
Type: Depth (in Remarks: No DROLOG Vetland Hyn Primary India] Surface 1] High Wa	ches): o hydric soil indicato SY drology Indicators cators (minimum of Water (A1) ter Table (A2)	ors :: one requ	uired; ch	eck all tha	t apply r-Stair , 2, 4A	/) ned Leav	/es (B9) (6 3)	except ML	Hydri RA	<mark>secon</mark> Secon	Present? Yes D No dary Indicators (2 or mor ater-Stained Leaves (B9) 4A, and 4B)	e required) (MLRA 1, 2
Type: Depth (in Remarks: No DROLOG Vetland Hyo Primary India Surface V High Wa Saturatic	ches): o hydric soil indicato SY drology Indicators cators (minimum of Water (A1) .ter Table (A2) on (A3)	prs ;: one requ	uired; ch	eck all that Wate 1 Salt	t apply r-Stair , 2, 4A Crust (/) ned Leav a, and 4E B11)	ves (B9) (6 3)	except ML	RA	<mark>Secon</mark> □ Wa	Present? Yes No dary Indicators (2 or mor ater-Stained Leaves (B9) 4A, and 4B) ainage Patterns (B10)	e required) (MLRA 1, 1
Type: Depth (in Remarks: No DROLOG Vetland Hy Primary India Surface 1 High Wa Saturatic Water M	aches): o hydric soil indicators cators (minimum of Water (A1) tter Table (A2) on (A3) arks (B1)	ors ;: one requ	uired; ch	eck all that Wate 1 Salt	t apply er-Stair , 2, 4A Crust (ttic Inv	/) ned Leav A, and 4E B11) ertebrate	/es (B9) (6 3) es (B13)	except ML	RA	<mark>Secon</mark> □ Wa □ Dra □ Dry	Present? Yes No dary Indicators (2 or mor ater-Stained Leaves (B9) 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C	• <u>e required)</u> (MLRA 1, :
Type: Depth (in Remarks: No Primary India Surface ' High Wa Saturatic Water M Sedimen	aches):	ors ;: one requ		eck all tha Wate Salt Aqua	t apply r-Stair , 2, 4A Crust (itic Inv ogen S	/) hed Leav 1, and 4E B11) ertebrate Sulfide O	ves (B9) (6 3) es (B13) edor (C1)	except ML	Hydri RA	<u>Secon</u> □ Wa □ Dra □ Dry □ Sa	Present? Yes No dary Indicators (2 or mor ater-Stained Leaves (B9) 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C turation Visible on Aerial	2 ⊠ <u>e required)</u> (MLRA 1, 2 2) Imagery (C
Type: Depth (in Remarks: No DROLOG Vetland Hyn Yrimary India Surface V High Wa Saturatic Water M Saturatic Water M Sedimen Drift Dep	ches): o hydric soil indicators cators (minimum of Water (A1) iter Table (A2) on (A3) arks (B1) it Deposits (B2) posits (B3)	ors .: one requ		eck all tha Wate Salt Aqua Hydr Oxid	t apply r-Stair , 2, 4A Crust (ttic Inv ogen S zed R	/) ned Leav A, and 4E B11) ertebrate Sulfide O hizosphe	ves (B9) (6 3) es (B13) edor (C1) eres along	except ML	RA bts (C3)	<u>Secon</u> <u>Secon</u> □ Dra □ Dra □ Dry □ Sa □ Ge	Present? Yes No dary Indicators (2 or mor ater-Stained Leaves (B9) 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C turation Visible on Aerial comorphic Position (D2)	e required) (MLRA 1, 2 2) Imagery (C
Type: Depth (in Remarks: No DROLOC Vetland Hyo Primary Indio Surface High Wa Saturatic Water M Sedimen Drift Dep Algal Ma	ches): o hydric soil indicato o hydric soil indicato SY drology Indicators cators (minimum of Water (A1) iter Table (A2) on (A3) arks (B1) it Deposits (B2) posits (B3) it or Crust (B4)	ors :: one requ	uired; ch	eck all tha Wate Salt Aqua Hydr Oxid Pres	t apply r-Stair , 2, 4A Crust (tic Inv ogen S zed R ence o	/) ned Leav a, and 4E B11) ertebrate Sulfide O hizosphe f Reduce	ves (B9) (6 3) es (B13) edor (C1) eres along ed Iron (C	except ML Living Roo 4)	RA bts (C3)	<u>Secon</u> □ Wa □ Dra □ Dra □ Sa □ Ge □ Sh	Present? Yes No dary Indicators (2 or mor ater-Stained Leaves (B9) 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C turation Visible on Aerial comorphic Position (D2) allow Aquitard (D3)	e required) (MLRA 1, 2 2) Imagery (C
Type: Depth (in Remarks: No DROLOG Vetland Hy Primary India Surface V High Wa Saturatic Water M Sedimen Drift Dep Algal Ma Iron Dep	ches): o hydric soil indicato o hydric soil indicato cators (minimum of Water (A1) tter Table (A2) on (A3) arks (B1) tt Deposits (B2) posits (B3) tt or Crust (B4) posits (B5)	ors	uired; ch	eck all tha Wate Salt Aqua Hydr Oxid Pres Rece	t apply r-Stair , 2, 4A Crust (tic Inv ogen S zed R ence o ent Iror	/) ned Leav , and 4E B11) ertebrate Sulfide O hizosphe f Reduce n Reduct	ves (B9) (6 3) es (B13) edor (C1) eres along ed Iron (C ion in Tille	except ML Living Rod 4) ed Soils (Ce	RA Thydri	<u>Secon</u> □ Wa □ Dra □ Dr □ Sa □ Ge □ Sh □ FA	Present? Yes No dary Indicators (2 or mor- ater-Stained Leaves (B9) 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C turation Visible on Aerial comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5)	e required) (MLRA 1, 1 2) Imagery (C
Type: Depth (in Remarks: No DROLOG Vetland Hy Primary India Surface V High Wa Saturatic Water M Sedimen Drift Dep Algal Ma Iron Dep Surface S	aches):	ors ;: one requ		eck all tha Wate Salt Aqua Hydr Oxid Pres Rece Stun	t apply r-Stair , 2, 4A Crust (tic Inv ogen S zed R ence c ent Iror ied or	/) hed Leav 1, and 4E B11) ertebrate Sulfide O hizosphe f Reduct t Reduct Stressec	ves (B9) (6 3) es (B13) edor (C1) eres along ed Iron (C ion in Tille d Plants (E	Except ML Living Rod 4) ed Soils (Cd 01) (LRR A	RA RA	Secon Secon Dra Dra Dra Sa Ge Sh FA	Present? Yes No dary Indicators (2 or more ater-Stained Leaves (B9) 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C turation Visible on Aerial comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounds (D6) (L	e required) (MLRA 1, 2 2) Imagery (C RR A)
Type: Depth (in Remarks: No DROLOG Wetland Hy Primary India Grimary India Grima	aches):	ors :: one requ Imagery	<u>uired; ch</u>	eck all tha Wate Salt Aqua Hydr Oxid Pres Rece Stun Othe	t apply r-Stair , 2, 4A Crust (titic Inv ogen S zed R ence o ent Iror ted or r (Expl	/) ned Leav a, and 4E B11) ertebrate Sulfide O hizosphe f Reduct Stressec lain in Re	ves (B9) (e 3) es (B13) edor (C1) eres along ed Iron (C ion in Tille d Plants (E emarks)	Except ML Living Roo 4) Ind Soils (Ce 21) (LRR A	Hydri Hydri RA bts (C3) b)	Second Second Dra Dra Dry Sa Ge Sh FA Ra FA	Present? Yes No dary Indicators (2 or mor ater-Stained Leaves (B9) 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C turation Visible on Aerial comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounds (D6) (L ost-Heave Hummocks (D	e required) (MLRA 1, (2) Imagery (C RR A) 7)
Type: Depth (in Remarks: No 'DROLOG Wetland Hy Primary India Gurface ' High Wa Saturatic Water M Saturatic Water M Sedimen Drift Dep Algal Ma Iron Dep Surface ' Surface ' Sparsely	ches): o hydric soil indicators cators (minimum of Water (A1) iter Table (A2) on (A3) arks (B1) it Deposits (B2) oosits (B3) it or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aerial ' Vegetated Concav	ors .: one requ Imagery 'e Surfac	<u>uired; ch</u> (B7) xe (B8)	eck all tha Wate Salt Aqua Hydr Oxid Pres Rece Stun Othe	t apply r-Stair , 2, 4A Crust (tic Inv ogen S zed R ence o ent Iror ied or r (Expl	/) ned Leav A, and 4E B11) ertebrate Sulfide O hizosphe f Reduct f Reduct Stressec lain in Re	ves (B9) (6 3) es (B13) edor (C1) eres along ed Iron (C ion in Tille d Plants (E emarks)	Except ML Living Rod 4) od Soils (Cd D1) (LRR A	Hydri RA ots (C3)	Second Second Dra Dra Dra Sa Ge Sh FA Ra FA	Present? Yes No dary Indicators (2 or mor ater-Stained Leaves (B9) 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C turation Visible on Aerial comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounds (D6) (L ost-Heave Hummocks (D	e required) (MLRA 1, (2) Imagery (C RR A) 7)
Type: Depth (in Remarks: No 'DROLOG Wetland Hy Primary India Guiden Ma Saturatio Water M Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface S Surface S Inundatio Sparsely Field Obser	ches): o hydric soil indicators o hydric soil indicators cators (minimum of Water (A1) iter Table (A2) on (A3) arks (B1) it Deposits (B2) oosits (B3) it or Crust (B4) iosits (B5) Soil Cracks (B6) on Visible on Aerial ' Vegetated Concav vations:	ors .: one required Imagery 'e Surfac	<u>uired; ch</u> (B7) ;e (B8)	eck all tha Wate Salt Aqua Hydr Oxid Pres Rece Stun Othe	t apply r-Stair , 2, 4A Crust (tic Inv ogen S zed R ence o ent Iror ted or r (Expl	/) ned Leav a, and 4E B11) ertebrate Sulfide O hizosphe f Reduct f Reduct Stressec lain in Re	ves (B9) (6 3) Idor (C1) eres along ed Iron (C ion in Tille d Plants (E emarks)	except ML Living Rod 4) ed Soils (Ce D1) (LRR A	Hydri RA ots (C3) 6)	Second Second Second Dra Dra Dra Sa C Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa Sa	Present? Yes No dary Indicators (2 or more ater-Stained Leaves (B9) 4A, and 4B) ainage Patterns (B10) y-Season Water Table (Cturation Visible on Aerial comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounds (D6) (Lost-Heave Hummocks (D6)	• 🖂 • required) (MLRA 1, :2) Imagery (C RR A) 7)
Type: Depth (in Remarks: No 'DROLOG Wetland Hy Primary India Gurface G High Wa Saturatic Water M Sedimen Drift Dep Algal Ma Drift Dep Algal Ma Iron Dep Surface G Sparsely Field Obser Surface Wat	ches): o hydric soil indicators o hydric soil indicators cators (minimum of Water (A1) iter Table (A2) on (A3) arks (B1) it Deposits (B2) posits (B3) it or Crust (B4) iosits (B5) Soil Cracks (B6) on Visible on Aerial ' Vegetated Concav vations: er Present?	Drs	<u>uired; ch</u> (B7) xe (B8)	eck all tha Wate Salt Aqua Hydr Oxid Pres Rece Stun Othe	t apply r-Stair , 2, 4A Crust (titic Inv ogen S zed R ence o ent Iror ted or r (Expl nches	/) ned Leav a, and 4E B11) ertebrate Sulfide O hizosphe f Reduct Stressec lain in Re):	ves (B9) (e 3) es (B13) ed ron (C1) eres along ed Iron (C ion in Tille d Plants (E emarks)	Except ML Living Rod 4) ed Soils (Cd 01) (LRR A	Hydri RA ots (C3)	Secon Wa Dra Dra Or Sa Ge Sh FA Ra Frc	Present? Yes No dary Indicators (2 or more ater-Stained Leaves (B9) 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C turation Visible on Aerial comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounds (D6) (L ost-Heave Hummocks (D	e required) (MLRA 1, (2) Imagery (C RR A) 7)
Type: Depth (in Remarks: No 'DROLOG Wetland Hy Primary India G Surface G High Wa Saturatic Water M Sedimen Drift Dep Algal Ma Iron Dep Surface G Surface S Surface Wat Water Table	aches):	Imagery e Surfac Yes []	' (B7) ;e (B8) No ⊠ No ⊠	eck all tha Wate Salt Aqua Hydr Oxid Pres Rece Stun Othe Depth (Depth (t apply r-Stair , 2, 4A Crust (titic Inv ogen S zed R ence o ent Iror ted or r (Expl nches nches	/) hed Leav a, and 4E B11) ertebrate Sulfide O hizosphe f Reduct Stressec lain in Re):):	ves (B9) (6 3) es (B13) edor (C1) eres along ed Iron (C ion in Tille d Plants (E emarks)	Eiving Roo 4) d Soils (Ce 01) (LRR A	Hydri RA bts (C3) b)	Second Second Dra Dra Dry Sa Ge Sh FA Ra Fro	Present? Yes No dary Indicators (2 or mor ater-Stained Leaves (B9) 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C turation Visible on Aerial comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounds (D6) (L ost-Heave Hummocks (D	e required) (MLRA 1, (2) Imagery (C RR A) 7)

Remarks: No indicators of hydrology

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

(includes capillary fringe)

Project/Site: Cumberland Segale	City/County:	King County	Sampling Date: <u>12/3/19</u>
Applicant/Owner: <u>Segale</u>		State: WA	Sampling Point: SP2
Investigator(s): Will Russack, Kolten Kosters	9	Section, Township, Range: T.21N R.	07E S.21SE
Landform (hillslope, terrace, etc.): Slope	Local relief	(concave, convex, none): Convex	Slope (%): <u>3-5</u>
Subregion (LRR): <u>NW Forest</u>	Lat: <u>47.2899</u>	Long: <u>-121.9223</u>	Datum: WGS 84
Soil Map Unit Name: Barneston gravelly ashy coarse :	sandy loam	NWI classifica	ation: <u>None</u>
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" pre	sent? Yes 🛛 No 🗌
Are Vegetation, Soil, or Hydrology	_ naturally problematic?	(If needed, explain any answers in	n Remarks.)
SUMMARY OF FINDINGS – Attach site r	nap showing sampling	point locations, transects	, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes □ No ⊠ Yes □ No ⊠ Yes □ No ⊠	Is the Sampled Area within a Wetland?	Yes 🗌 No 🖾
Remarks: 21E Test Pit			

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>5 m</u>)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1. <u>Pseudotsuga menziesii (Douglas fir)</u>	90	<u>Y</u>	FACU	That Are OBL, FACW, or FAC: <u>1</u> (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>4</u> (B)
4				Demonst of Deminant Creation
	90	= Total C	over	That Are OBL, FACW, or FAC: 25 (A/B)
Sapling/Shrub Stratum (Plot size: 3 m)				
1. Rubus ursinus (trailing blackberry)	20	<u>Y</u>	FACU	Prevalence Index worksheet:
2. Acer circinatum (vine maple)	10	<u>Y</u>	FAC	Total % Cover of:Multiply by:
3				OBL species x 1 =
4				FACW species x 2 =
5				FAC species x 3 =
	30	= Total C	over	FACU species x 4 =
Herb Stratum (Plot size: <u>3 m</u>)				UPL species x 5 =
1. Polystichum munitum (Sword fern)	40	<u>Y</u>	FACU	Column Totals: (A) (B)
2				
3				Prevalence Index = B/A =
4		·		Hydrophytic Vegetation Indicators:
5				1 - Rapid Test for Hydrophytic Vegetation
6.				2 - Dominance Test is >50%
7.				☐ 3 - Prevalence Index is ≤3.0 ¹
8.				4 - Morphological Adaptations ¹ (Provide supporting
9.				data in Remarks or on a separate sheet)
10		·		5 - Wetland Non-Vascular Plants ¹
11				Problematic Hydrophytic Vegetation ¹ (Explain)
····	40	– Total C	over	¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 3 m)	<u>-10</u>	- 101010	0001	be present, unless disturbed or problematic.
1				
2.				Hydrophytic Vogetation
		= Total C	over	Present? Yes 🗌 No 🖂
% Bare Ground in Herb Stratum 60				
Remarks:				

Sampling Point: SP2

(inches)	Color (moist)	%	Colo	or (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-4	10YR 2/1	100						Loam/Duff	
4-18	10YR 4/4	100						Sandy Loam	
						- <u></u>			
						- <u></u>		·	
								·	
Type: C=C	indicators: (Appl	epletion, licable to		duced Matrix, (CS=Covered	d or Coate	ed Sand Gr	ains. ² Loca	ation: PL=Pore Lining, M=Matrix.
				Sondy Podoy	(95)	eu.)			Muck (A10)
☐ Histic F	nipedon (A2)			Stripped Matri	(33) x (S6)				Parent Material (TF2)
Black H	istic (A3)			Loamy Mucky	Mineral (F1) (except	MLRA 1)		Shallow Dark Surface (TF12)
 Hydroge	en Sulfide (A4)			Loamy Gleyed	Matrix (F2))	,	Other	(Explain in Remarks)
Deplete	d Below Dark Surfa	ce (A11)		Depleted Matr	ix (F3)				
Thick D	ark Surface (A12)			Redox Dark S	urface (F6)			³ Indicators	s of hydrophytic vegetation and
Sandy N	Aucky Mineral (S1)			Depleted Dark	Surface (F	7)		wetlan	d hydrology must be present,
Sandy C	Gleyed Matrix (S4)			Redox Depres	sions (F8)			unless	disturbed or problematic.
restrictive	Layer (if present)								
Type:									
Depth (ir	nches):							Hydric Soil F	Present? Yes 📋 No 🖂
DROLO	GY								
Netland Hy	drology Indicator	s:							
Primary Ind	icators (minimum o	<u>f one req</u>	uired; ch	eck all that ap	ply)			Second	dary Indicators (2 or more required
Surface	Water (A1)			☐ Water-State	ained Leave	es (B9) (e	xcept MLR	RA 🗌 Wa	ter-Stained Leaves (B9) (MLRA 1,
High Wa	ater Table (A2)			1, 2, 4	4A, and 4B)		_	4A, and 4B)
Saturati	on (A3)			Salt Crus	t (B11)			🗋 Dra	inage Patterns (B10)
_ Water M	larks (B1)			Aquatic I	nvertebrates	s (B13)		∐ Dry	-Season Water Table (C2)
_ Sedime	nt Deposits (B2)				n Sulfide Oc	lor (C1)		∐ Sat	uration Visible on Aerial Imagery (
Drift De	posits (B3)				Khizospher	es along		ts (C3) ∐ Ge	omorphic Position (D2)
	at or Grust (B4)					u Iron (C4	+) d Saila (CC		anow Aquitard (D3)
Algal Ma									
Algal Ma	Soil Crocks (PE)			Ctuntod o	vr Stroppod	Dianta /1			
Algal Ma Iron Dej Surface	Soil Cracks (B6)	Imagen	/ (B7)		or Stressed	Plants (D marks)	1) (LRK A)		st-Heave Hummocks (D7)
Algal Ma Iron De Surface	Soil Cracks (B6) on Visible on Aeria	l Imagery	/ (B7) ce (B8)	☐ Stunted o	or Stressed cplain in Re	Plants (D marks)	1) (LKK A)	Fro	st-Heave Hummocks (D7)
Algal Ma Iron Dep Surface Inundati Sparsel	Soil Cracks (B6) on Visible on Aeria y Vegetated Conca	l Imagery ve Surfa	/ (B7) ce (B8)	☐ Stunted c	or Stressed oplain in Rei	Plants (D marks)	1) (LRR A)	Fro	st-Heave Hummocks (D7)
Algal M: Iron De Surface Inundati Sparsel Field Obse	Soil Cracks (B6) on Visible on Aeria y Vegetated Conca rvations:	I Imagery ve Surfac	/ (B7) ce (B8)	Stunted c Other (E) Depth (inch)	or Stressed	Plants (D marks)			st-Heave Hummocks (D7)
Algal M: Algal M: Iron De Surface Inundati Sparsel Field Obse Surface Wa	Soil Cracks (B6) on Visible on Aeria y Vegetated Conca rvations: ter Present?	I Imagery ve Surfac Yes 🗌	/ (B7) ce (B8) No ⊠	Depth (inche	es):	Plants (D marks)			st-Heave Hummocks (D7)
Algal M: Iron Dep Iron Dep Surface Inundati Sparsel Field Obse Surface Wa Water Table	Soil Cracks (B6) Soil Cracks (B6) on Visible on Aeria y Vegetated Conca rvations: ter Present? Present?	I Imagery ve Surfac Yes Yes Yes Ves Ves Ves Ves Ves Ves Ves V	/ (B7) ce (B8) No ⊠ No ⊠	Depth (inche Depth (inche	or Stressed (plain in Re es): es):	Plants (D marks)			st-Heave Hummocks (D7)

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

Remarks: No indicators of hydrology

Project/Site: Cumberland Segale	City/County:	King County	Sampling Date: 12/3/19
Applicant/Owner: Segale		State: WA	Sampling Point: SP3
Investigator(s): Kolten Kosters, Will Russack	s	Section, Township, Range: <u>T.21N R</u>	.07E S.21NW
Landform (hillslope, terrace, etc.): depression	Local relief	(concave, convex, none): Concave	Slope (%): <u>3-5</u>
Subregion (LRR): NW Forest	Lat: <u>47.2957</u>	Long: <u>-121.9292</u>	Datum: WGS 84
Soil Map Unit Name: Barneston gravelly ashy coarse s	andy loam & Arents	NWI classific	ation: <u>None</u>
Are climatic / hydrologic conditions on the site typical for	or this time of year? Yes 🛛	No 🔲 (If no, explain in Remarks.))
Are Vegetation, Soil, or Hydrology	significantly disturbed?	Are "Normal Circumstances" pre	sent? Yes 🛛 No 🗌
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any answers i	n Remarks.)
SUMMARY OF FINDINGS – Attach site m	nap showing sampling	point locations, transects	, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes ⊠ No □ Yes □ No ⊠ Yes □ No ⊠	Is the Sampled Area within a Wetland?	Yes 🔲 No 🖾
Remarks: 21B Test Pit			

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>5 m</u>)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1. Alnus rubra (red alder)	20	<u>Y</u>	FAC	That Are OBL, FACW, or FAC: <u>3</u> (A)
2. Pseudotsuga menziesii (Douglas fir)_	10	Y	FACU	Total Number of Dominant
3				Species Across All Strata: <u>5</u> (B)
4				
	30	= Total C	over	Percent of Dominant Species That Are OBL_EACW_or_EAC: 60 (A/B)
Sapling/Shrub Stratum (Plot size: 3 m)				
1. <u>Spiraea douglasii (Douglas spiraea)</u>	40	Υ	FACW	Prevalence Index worksheet:
2. Pseudotsuga menziesii (Douglas fir)	20	Y	FACU	Total % Cover of:Multiply by:
3. Alnus rubra (red alder)	20	Y	FAC	OBL species x 1 =
4. Rubus armeniacus (Himalayan blackberry)	10	N	FAC	FACW species x 2 =
5.				FAC species x 3 =
	90	= Total C	over	FACU species x 4 =
Herb Stratum (Plot size: <u>3 m</u>)				UPL species x 5 =
1				Column Totals: (A) (B)
2				
3				Prevalence Index = B/A =
4				Hydrophytic Vegetation Indicators:
5				1 - Rapid Test for Hydrophytic Vegetation
6.				☑ 2 - Dominance Test is >50%
7.				☐ 3 - Prevalence Index is ≤3.0 ¹
8.				4 - Morphological Adaptations ¹ (Provide supporting
9				data in Remarks or on a separate sheet)
10				5 - Wetland Non-Vascular Plants ¹
11				Problematic Hydrophytic Vegetation ¹ (Explain)
···		- Total C		¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 3 m)			Over	be present, unless disturbed or problematic.
1.				
2.				Hydrophytic Vegetation
		= Total C	over	Present? Yes 🛛 No 🗌
% Bare Ground in Herb Stratum <u>0</u>		= 1 Star O		
Remarks:				

Sampling Point: SP3

(1101103)	Color (moist)	%	Colo	or (moist)	%	Type ¹	Loc ²	Textu	ure Remarks	
)-6	<u>10YR 4/2</u>	100						<u>Gr.S.L</u>	L	
		<u> </u>								
		<u> </u>								
						<u> </u>			··	
vpe: C=Co	ncentration, D=D	epletion,	RM=Rec	luced Matrix	, CS=Covered	d or Coate	ed Sand Gr	ains.	² Location: PL=Pore Lining, M=M	atrix.
ydric Soil I	ndicators: (Appl	icable to	all LRF	ls, unless o	therwise not	ed.)		In	ndicators for Problematic Hydric S	oils ³ :
] Histosol (A1)			Sandy Redo	ox (S5)				2 cm Muck (A10)	
Histic Epi	pedon (A2)			Stripped Ma	trix (S6)				Red Parent Material (TF2)	
Black His	tic (A3)			Loamy Mucl	ky Mineral (F1) (except	MLRA 1)		Very Shallow Dark Surface (TF12))
] Hydrogen	Sulfide (A4)	(Loamy Gley	ed Matrix (F2))		L	Other (Explain in Remarks)	
Depleted	Below Dark Surfa	ce (A11)		Depleted Ma	atrix (F3)			31		ام مر
] INICK Dar	K Sufface (A12)			Redox Dark	Surface (F6)	'7 \		°I	Indicators of hydrophytic vegetation a	ina
Sandy IVIL	acky Mineral (S1)			Depleted Da Rodov Door	ark Surface (F	()			wetland hydrology must be present	,
strictive I	aver (if present)			Redux Depi	essions (Fo)				unless disturbed of problematic.	
	mosted Crovel									
Type. <u>Cop</u>										
Depth (Inc	nes): <u>6</u>		<u> </u>					Hyar		
Remarks: Site	e appears excava	iea; poss	lble form	ier gravel bo	prrow pit. No n	iyaric soli	Indicators			
	Y Irology Indicator									
DROLOG	Y Irology Indicator	s:	uired: ch	eck all that a	apply)				Secondary Indicators (2 or more re	quired)
DROLOG	Y Irology Indicator ators (minimum o	s: f one req	uired; ch	eck all that a	apply) Stained Leave	as (B9) (a	vcent MI R	20	Secondary Indicators (2 or more re	quired)
DROLOG /etland Hyd rimary Indic Surface V	Y Irology Indicator ators (minimum o Vater (A1) er Table (A2)	s: f one req	uired; ch	eck all that a	apply) Stained Leave	es (B9) (e	xcept MLR	RA	Secondary Indicators (2 or more re Water-Stained Leaves (B9) (ML	quired) .RA 1,
DROLOG Vetland Hyd rimary Indica Surface V High Wate Saturation	Y Irology Indicator ators (minimum o Vater (A1) er Table (A2)	s: f one req	uired; ch	eck all that a	apply) Stained Leave 2, 4A, and 4B	es (B9) (e)	xcept MLR		Secondary Indicators (2 or more re Water-Stained Leaves (B9) (ML 4A, and 4B)	quired) .RA 1,
PROLOG Vetland Hyd rimary Indic:] Surface V] High Wate] Saturation] Water Mo	Y Irology Indicator ators (minimum o Vater (A1) er Table (A2) n (A3) urks (B1)	<mark>s:</mark> f one req	uired; ch	eck all that a	apply) Stained Leave 2, 4A, and 4B ust (B11)	es (B9) (e)	xcept MLR	A	Secondary Indicators (2 or more re Water-Stained Leaves (B9) (ML 4A, and 4B) Drainage Patterns (B10)	quired) .RA 1,
PROLOG /etland Hyd rimary Indic:] Surface V] High Water] Saturation] Water Ma] Sedimont	Y Irology Indicator ators (minimum o Vater (A1) er Table (A2) n (A3) arks (B1) : Denosits (P2)	s: f one req	uired; ch	eck all that a	apply) Stained Leave 2, 4A, and 4B ust (B11) c Invertebrate:	es (B9) (e) s (B13)	xcept MLR	XA	Secondary Indicators (2 or more re Water-Stained Leaves (B9) (ML 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)	quired) .RA 1,
PROLOG /etland Hyd rimary Indic: Surface V High Wate Saturation Water Ma Sediment Drift Deco	Y Irology Indicator ators (minimum o Vater (A1) er Table (A2) n (A3) arks (B1) : Deposits (B2) posits (B3)	s: f one req	uired; ch	eck all that a Water- 1, 2 Salt Cr Aquatio	apply) Stained Leave 2, 4A, and 4B ust (B11) c Invertebrates gen Sulfide Oc	es (B9) (e) s (B13) dor (C1)	xcept MLR	XA	Secondary Indicators (2 or more re Water-Stained Leaves (B9) (ML 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Ima	<u>quired)</u> RA 1, gery (C
Vetland Hyd rimary Indic Surface V High Wate Saturation Water Ma Sediment Drift Depo	Y Irology Indicator ators (minimum o Vater (A1) er Table (A2) n (A3) arks (B1) : Deposits (B2) posits (B3) or Crust (B4)	s: f one req	<u>uired; ch</u>	eck all that a Water- 1, 2 Salt Cr Aquatio Hydrog Oxidize	apply) Stained Leave 2, 4A, and 4B ust (B11) c Invertebrates jen Sulfide Oc ed Rhizospher	es (B9) (e) s (B13) dor (C1) res along d trop (C1	xcept MLR	ts (C3)	Secondary Indicators (2 or more re Water-Stained Leaves (B9) (ML 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Ima Geomorphic Position (D2)	<u>quired)</u> RA 1, ∶ gery (C
PROLOG retland Hyd rimary Indic: Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mat	Y Irology Indicator ators (minimum o Vater (A1) er Table (A2) n (A3) arks (B1) : Deposits (B2) posits (B3) or Crust (B4) posits (B5)	s: f one req	uired; ch	eck all that a Water- 1, 2 Salt Cr Aquatio Hydrog Oxidize Presen	apply) Stained Leave 2, 4A, and 4B ust (B11) c Invertebrate jen Sulfide Oc ed Rhizospher ice of Reduce	es (B9) (e) s (B13) dor (C1) res along d Iron (C4	Living Root	A ts (C3)	Secondary Indicators (2 or more re Water-Stained Leaves (B9) (ML 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Ima Geomorphic Position (D2) Shallow Aquitard (D3)	<u>quired)</u> .RA 1, gery (C
PROLOG /etland Hyd rimary Indic: Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S	Y Irology Indicator ators (minimum o Vater (A1) er Table (A2) n (A3) arks (B1) : Deposits (B2) posits (B3) or Crust (B4) posits (B5) Poil Cracke (B6)	<mark>s:</mark> <u>f one req</u>	<u>uired; ch</u>	eck all that a Water- 1, 2 Salt Cr Aquatio Hydrog Oxidize Presen Recent	apply) Stained Leave 2, 4A, and 4B ust (B11) c Invertebrates gen Sulfide Oc ed Rhizospher ice of Reduce i Iron Reductio	es (B9) (e) s (B13) dor (C1) res along d Iron (C4 pn in Tiller Plants (C	Living Root	ts (C3)	Secondary Indicators (2 or more re Water-Stained Leaves (B9) (ML 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Ima Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raired Apt Mounds (D6) (LPB	guired) .RA 1, ∶ gery (C
DROLOG Vetland Hyd rimary Indica Surface V High Water Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation	Y Irology Indicator ators (minimum o Vater (A1) er Table (A2) n (A3) arks (B1) : Deposits (B2) posits (B3) or Crust (B4) posits (B5) Soil Cracks (B6) n Visible on Apric	s: fone req	uired; ch	eck all that a Water- 1, 2 Salt Cr Aquatio Hydrog Oxidize Presen Recent Stunted	apply) Stained Leave 2, 4A, and 4B ust (B11) c Invertebrates use Sulfide Oc ed Rhizospher ice of Reduce i Iron Reduction d or Stressed Explain in Po	es (B9) (e) s (B13) dor (C1) res along d Iron (C4 on in Tille Plants (D	xcept MLR Living Root) d Soils (C6) 1) (LRR A)	ts (C3)	Secondary Indicators (2 or more re Water-Stained Leaves (B9) (ML 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Ima Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR	quired) .RA 1, gery (C A)
PROLOG /etland Hyd rimary Indic Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mate Iron Depo Surface S Inundation Sparsely	Y Irology Indicator ators (minimum o Vater (A1) er Table (A2) n (A3) arks (B1) : Deposits (B2) posits (B3) or Crust (B4) posits (B5) Soil Cracks (B6) n Visible on Aeria	s: fone req Imagery	<u>uired; ch</u>	eck all that a Water- 1, 2 Salt Cr Aquatio Hydrog Oxidize Presen Recent Stunted Other (apply) Stained Leave 2, 4A, and 4B ust (B11) c Invertebrates gen Sulfide Oc ed Rhizospher ice of Reduce ice of Reduce i Iron Reduction d or Stressed Explain in Re	es (B9) (e) dor (C1) res along d Iron (C4 on in Tiller Plants (D marks)	Living Root	ts (C3)	Secondary Indicators (2 or more re Water-Stained Leaves (B9) (ML 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Ima Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR Frost-Heave Hummocks (D7)	guired) RA 1, gery (C A)
PROLOG Vetland Hyd rimary Indic. Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mate Iron Depo Surface S Inundation Sparsely	Y Irology Indicator ators (minimum o Vater (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) posits (B3) or Crust (B4) posits (B5) Soil Cracks (B6) n Visible on Aeria Vegetated Conca	s: fone req Imagery ve Surfac	<u>uired; ch</u> ' (B7) :e (B8)	eck all that a Water- 1, 2 Salt Cr Aquatio Hydrog Oxidize Present Recent Stunted Other (apply) Stained Leave 2, 4A, and 4B ust (B11) c Invertebrates gen Sulfide Oc ed Rhizospher ice of Reduce c ron Reducted d or Stressed Explain in Re	es (B9) (e) dor (C1) res along d Iron (C4 on in Tille Plants (D marks)	Living Rood J Soils (C6) 1) (LRR A)	ts (C3)	Secondary Indicators (2 or more re Water-Stained Leaves (B9) (ML 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Ima Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR Frost-Heave Hummocks (D7)	guired) RA 1, gery (C A)
DROLOG Vetland Hyd Primary Indic: Surface V High Water Saturation Water Ma Sediment Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely ield Observ	Y Irology Indicator ators (minimum or Vater (A1) er Table (A2) n (A3) arks (B1) : Deposits (B2) osits (B3) or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aeria Vegetated Conca vations: a Deposit 2	s: fone req l Imagery ve Surfac	uired; ch (B7) xe (B8)	eck all that a Water- 1, 2 Salt Cr Aquatio Hydrog Oxidize Present Recent Stunted Other (apply) Stained Leave 2, 4A, and 4B ust (B11) c Invertebrates gen Sulfide Oc ed Rhizospher ce of Reduce to Reduce for Reduction d or Stressed Explain in Re	es (B9) (e) dor (C1) res along d Iron (C4 Don in Tille Plants (D marks)	Living Roof) d Soils (C6) 1) (LRR A)	ts (C3)	Secondary Indicators (2 or more re Water-Stained Leaves (B9) (ML 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Ima Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR Frost-Heave Hummocks (D7)	guired) RA 1, ∷ gery (C A)
	Y Irology Indicator ators (minimum o Vater (A1) er Table (A2) n (A3) arks (B1) : Deposits (B2) osits (B3) or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aeria Vegetated Conca vations: er Present?	s: f <u>one req</u> Imagery ve Surfac Yes	<u>uired; ch</u> (B7) ≥e (B8)	eck all that a Water- 1, 2 Salt Cr Aquatio Hydrog Oxidize Presen Recent Stunted Other (apply) Stained Leave 2, 4A, and 4B ust (B11) c Invertebrate: gen Sulfide Oc ed Rhizospher ice of Reduce ice of Reduce ice of Reduce ice of Reduce chor Stressed Explain in Re	es (B9) (e) s (B13) dor (C1) res along d Iron (C4 pn in Tiller Plants (D marks)	Living Root	ts (C3)	Secondary Indicators (2 or more re Water-Stained Leaves (B9) (ML 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Ima Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR Frost-Heave Hummocks (D7)	<u>quired)</u> .RA 1, ∷ gery (C A)
	Y Irology Indicator ators (minimum o Vater (A1) er Table (A2) n (A3) arks (B1) : Deposits (B2) posits (B3) or Crust (B4) posits (B5) Soil Cracks (B6) n Visible on Aeria Vegetated Conca vations: er Present? Present?	s: fone req fone req Yes urfac Yes Y	uired; ch (B7) >e (B8) No ⊠ No ⊠	eck all that a Water- 1, 2 Salt Cr Aquatio Hydrog Oxidize Presen Recent Stunted Other (Depth (ind	apply) Stained Leave 2, 4A, and 4B ust (B11) c Invertebrates gen Sulfide Oc ed Rhizospher ice of Reduce c Iron Reduction d or Stressed Explain in Re	es (B9) (e) s (B13) dor (C1) res along d Iron (C ² on in Tiller Plants (D marks)	xcept MLR	XA ts (C3)	Secondary Indicators (2 or more re Water-Stained Leaves (B9) (ML 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Ima Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR Frost-Heave Hummocks (D7)	guired) RA 1, 2 gery (C A)

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

Remarks: no indicators of hydrology

Project/Site: Cumberland Segale	City/County:	King County	Sampling Date: <u>12/3/19</u>
Applicant/Owner: Segale		State: WA	Sampling Point: SP4
Investigator(s): Kolten Kosters, Will Russack	s	Section, Township, Range: <u>T.21N R</u>	.07E S.21NW
Landform (hillslope, terrace, etc.): flat	Local relief	(concave, convex, none): Convex	Slope (%): <u>1-3</u>
Subregion (LRR): <u>NW Forest</u>	Lat: <u>47.2981</u>	Long: <u>121.9255</u>	Datum: WGS 84
Soil Map Unit Name: Beausite gravelly loam		NWI classific	ation: <u>None</u>
Are climatic / hydrologic conditions on the site typical f	for this time of year? Yes 🛛	No 🔲 (If no, explain in Remarks.))
Are Vegetation, Soil, or Hydrology	_ significantly disturbed?	Are "Normal Circumstances" pre	sent? Yes 🛛 No 🗌
Are Vegetation, Soil, or Hydrology	_ naturally problematic?	(If needed, explain any answers i	n Remarks.)
SUMMARY OF FINDINGS – Attach site n	nap showing sampling	point locations, transects	, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes ⊠ No □ Yes □ No ⊠ Yes □ No ⊠	Is the Sampled Area within a Wetland?	Yes 🔲 No 🖾
Remarks: 21C Test Pit			

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>5 m</u>)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1. Pseudotsuga menziesii (Douglas fir)	80	<u>Y</u>	FACU	That Are OBL, FACW, or FAC: <u>3</u> (A)
2. Thuja plicata (western red cedar)	<u>10</u>	N	FAC	Total Number of Dominant
3				Species Across All Strata: <u>5</u> (B)
4				Demonst of Deminent Creation
	90	= Total C	over	That Are OBL, FACW, or FAC: 60 (A/B)
Sapling/Shrub Stratum (Plot size: 3 m)				······································
1. Acer circinatum (vine maple)	<u>10</u>	<u>Y</u>	FAC	Prevalence Index worksheet:
2. Rubus spectabilis (salmonberry)	10	Y	FAC	Total % Cover of:Multiply by:
3				OBL species x 1 =
4				FACW species x 2 =
5.				FAC species x 3 =
	20	= Total C	over	FACU species x 4 =
Herb Stratum (Plot size: 3 m)				UPL species x 5 =
1. Polystichum munitum (Sword fern)	<u>30</u>	Y	FACU	Column Totals: (A) (B)
2. Tolmiea menziesii (piggy-back plant)	30	Y	FAC	
3. Carex deweyana (Dewey's sedge)	10	N	FAC	Prevalence Index = B/A =
4. Geranium robertianum (Robert geranium)	5	N	FACU	Hydrophytic Vegetation Indicators:
5				1 - Rapid Test for Hydrophytic Vegetation
6.				2 - Dominance Test is >50%
7.				☐ 3 - Prevalence Index is ≤3.0 ¹
8.				4 - Morphological Adaptations ¹ (Provide supporting
9.				data in Remarks or on a separate sheet)
10.				5 - Wetland Non-Vascular Plants ¹
11				Problematic Hydrophytic Vegetation ¹ (Explain)
····	75	- Total C	over	¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: <u>3 m</u>)			0101	be present, unless disturbed or problematic.
1				
2.				Hydrophytic Vegetation
		= Total C	over	Present? Yes 🛛 No 🗌
% Bare Ground in Herb Stratum 25				
Remarks:				

Sampling Point: SP4

(inches)	Color (moist)	%	Color (moist)	<u>% Type¹</u>	Loc ²	Texture	Remarks
0-8	7.5YR 2.5/2	100				Sandy Loam	
8-18	10YR 4/3	100				Sandy Loam	
	Concentration D_D				tod Sond C		option: DL-Doro Liping M-Matrix
Hydric Soil	Indicators: (Appli	icable to a	II LRRs, unless oth	nerwise noted.)	leu Sanu G	Indicate	ors for Problematic Hydric Soils ³ :
☐ Histosol ☐ Histic E ☐ Black H ☐ Hydroge	l (A1) pipedon (A2) istic (A3) en Sulfide (A4)		 Sandy Redox Stripped Matr Loamy Mucky Loamy Gleyer 	(S5) ix (S6) Mineral (F1) (excep d Matrix (F2)	ot MLRA 1)	☐ 2 cn ☐ Red ☐ Very ☐ Othe	n Muck (A10) Parent Material (TF2) / Shallow Dark Surface (TF12) er (Explain in Remarks)
Deplete	d Below Dark Surfa	ce (A11)	Depleted Mat	rix (F3)			
Thick D	ark Surface (A12)		Redox Dark S	Surface (F6)		³ Indicate	ors of hydrophytic vegetation and
Sandy N	Mucky Mineral (S1)		Depleted Darl	k Surface (F7)		wetla	and hydrology must be present,
Sandy C	Sleyed Matrix (S4)		Redox Depres	ssions (F8)		unles	ss disturbed or problematic.
Restrictive	Layer (if present):						
Type:			_				
Danth (in						Livelain Call	
Depth (ir Remarks: n	nches): o hydric soil indicato	ors				Hydric Soil	Present? Yes 🗌 No 🛛
Depth (ir Remarks: n	o hydric soil indicate	Drs				Hydric Soil	Present? Yes ☐ No ⊠
Depth (ir Remarks: n	o hydric soil indicato	Drs				Hydric Soil	Present? Yes 🗌 No 🛛
Depth (ir Remarks: n DROLOO Wetland Hy	o hydric soil indicato GY /drology Indicators	ors S:				Hydric Soil	Present? Yes No 🛛
Depth (ir Remarks: n DROLO(Vetland Hy Primary Ind	o hydric soil indicato o hydric soil indicato GY /drology Indicators icators (minimum of	ors s: one require	ed; check all that ap)ply)		Hydric Soil	ndary Indicators (2 or more required)
Depth (ir Remarks: n DROLOO Vetland Hy Primary Ind Surface	o hydric soil indicato o hydric soil indicato GY ydrology Indicators icators (minimum of Water (A1)	ors S: Tone require	ed; check all that ap	pply) ained Leaves (B9) (except MLI	Hydric Soil	I Present? Yes No ⊠ Indary Indicators (2 or more required)
Depth (ir Remarks: n DROLO(Vetland Hy Primary Ind Surface High Wa	o hydric soil indicato o hydric soil indicato GY /drology Indicators icators (minimum of Water (A1) ater Table (A2)	ors S: one require	ed; check all that ap	pply) tained Leaves (B9) (4A, and 4B)	except MLF	Hydric Soil	I Present? Yes No ⊠ Indary Indicators (2 or more required) ////////////////////////////////////
Depth (ir Remarks: n DROLOG Vetland Hy Primary Ind Surface High Wa Saturati	o hydric soil indicato o hydric soil indicators drology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3)	ors s: one require	ed; check all that ap Water-Si 1, 2, Salt Crus	oply) ained Leaves (B9) (4A, and 4B) st (B11)	except MLF	Hydric Soil	I Present? Yes No ⊠ Indary Indicators (2 or more required) ////////////////////////////////////
Depth (ir Remarks: n DROLOO Vetland Hy Primary Ind Surface High Wa Saturati Water N	o hydric soil indicato o hydric soil indicato GY /drology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) /larks (B1) pt Deposite (B2)	s: one require	ed; check all that ap Water-St 1, 2, Aquatic	pply) ained Leaves (B9) (4A, and 4B) st (B11) nvertebrates (B13)	except MLF	Hydric Soil	I Present? Yes No ⊠ Indary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 3) 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) oturnetic Name
Depth (ir Remarks: n DROLOO Vetland Hy Primary Ind Surface High Wa Saturati Saturati Saturati	o hydric soil indicato o hydric soil indicato GY /drology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) /larks (B1) nt Deposits (B2) posite (B2)	s: one require	ed; check all that ap Water-S 1, 2, Salt Crus Aquatic I Hydroge	pply) tained Leaves (B9) (4A, and 4B) st (B11) nvertebrates (B13) n Sulfide Odor (C1)	except MLF	Hydric Soil	I Present? Yes No ⊠ Indary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C accomprise Desition (D2)
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Remarks: no indicators of hydrology

Project/Site: Cumberland Segale	City/County:	King County	Sampling Date: 12/3/19
Applicant/Owner: <u>Segale</u>		State: WA	Sampling Point: SP5
Investigator(s): Kolten Kosters, Will Russack	S	Section, Township, Range: T.21N	R.07E S.17NE
Landform (hillslope, terrace, etc.): slope	Local relief	(concave, convex, none): Convex	Slope (%): <u>1-5</u>
Subregion (LRR): NW Forest	Lat: <u>47.3123</u>	Long: <u>-121.9344</u>	Datum: WGS 84
Soil Map Unit Name: Barneston gravelly ashy coal	rse sandy loam	NWI classifi	cation: <u>None</u>
Are climatic / hydrologic conditions on the site typic	cal for this time of year? Yes 🛛	No 🗌 (If no, explain in Remarks	3.)
Are Vegetation, Soil, or Hydrology	significantly disturbed?	Are "Normal Circumstances" p	resent? Yes 🛛 No 🗌
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any answers	in Remarks.)
SUMMARY OF FINDINGS – Attach sit	e map showing sampling	point locations, transect	s, important features, etc.
Hydrophytic Vegetation Present? Yes [□ No ⊠ Is th	e Sampled Area	

Hydric Soil Present? Wetland Hydrology Present?	Yes I No X Yes No X	Is the Sampled Area within a Wetland?	Yes 🗌 No 🛛	
Remarks: SP approx 150ft south of 7	17D Test Pit			

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>5 m</u>)	% Cover	Species?	Status	Number of Dominant Species
1. <u>Pseudotsuga menziesii (Douglas fir)</u>	<u>90</u>	Y	FACU	That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata: 3 (B)
4.				
	90	= Total C	over	Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: 3 m)				$\frac{1}{1}$
1. Gaultheria shallon (salal)	60	Y	FACU	Prevalence Index worksheet:
2. Rubus ursinus (trailing blackberry)	10	N	FACU	Total % Cover of: Multiply by:
3				OBL species x 1 =
4.				FACW species x 2 =
5.				FAC species x 3 =
	70	= Total C	over	FACU species x 4 =
Herb Stratum (Plot size: 3 m)				UPL species x 5 =
1. Polystichum munitum (Sword fern)	10	Y	FACU	Column Totals: (A) (B)
2				
3				Prevalence Index = B/A =
4.				Hydrophytic Vegetation Indicators:
5.				1 - Rapid Test for Hydrophytic Vegetation
6.				□ 2 - Dominance Test is >50%
7.		·		☐ 3 - Prevalence Index is ≤3.0 ¹
8		·		4 - Morphological Adaptations ¹ (Provide supporting
9		·		data in Remarks or on a separate sheet)
10		·		5 - Wetland Non-Vascular Plants ¹
10		·		Problematic Hydrophytic Vegetation ¹ (Explain)
11	10	- Total C	over	¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 3 m)	10		over	be present, unless disturbed or problematic.
<u> </u>				
2				Hydrophytic
		– Total C	over	Present? Yes No 🕅
% Bare Ground in Herb Stratum 20		- 101010		
Remarks:				

Sampling Point: SP5

Profile Desc	cription: (Descril	be to the	aepth n	eeded to docume			n the absence	of indicators.)
Depth (inchos)	Matrix	<u>(</u>		Redox	Features	$1 \log^2$	Toxturo	Pomarka
					<u>/o Type</u>			Remains
0-8	<u>7.5YR 2/2</u>	100					Sandy Loam	
8-12	<u>10YR 4/4</u>	100					Sandy Loam	
¹ Type: C=C	oncentration, D=D	epletion, l	RM=Rec	luced Matrix, CS=	Covered or C	oated Sand G	rains. ² Lo	cation: PL=Pore Lining, M=Matrix.
				Sondy Doday (SE				Muck (A10)
Histic Fr	(AT) Dipedon (A2)			Stripped Matrix (S) 66)			Parent Material (TF2)
Black Hi	stic (A3)			Loamy Mucky Mir	neral (F1) (exc	ept MLRA 1)	☐ Very	Shallow Dark Surface (TF12)
Hydroge	en Sulfide (A4)			Loamy Gleyed Ma	atrix (F2)	- ,	☐ Othe	er (Explain in Remarks)
Depleted	d Below Dark Surfa	ace (A11)		Depleted Matrix (F	=3)			
Thick Da	ark Surface (A12)			Redox Dark Surfa	ice (F6)		³ Indicato	ors of hydrophytic vegetation and
Sandy M	Aucky Mineral (S1)	1		Depleted Dark Su	rface (F7)		wetla	ind hydrology must be present,
Sandy G	Laver (if present)	۱-		Redox Depression	ns (F8)		unies	s disturbed of problematic.
Resulting		/-						
Type								
Type:	iches):						Hydric Soil	Present? Ves 🗆 No 🕅
Type: Depth (in Remarks: No	ches): o hydric soil indica	itors					Hydric Soil	Present? Yes 🗌 No 🖂
Type: Depth (in Remarks: No	ches): o hydric soil indica	itors					Hydric Soil	Present? Yes ☐ No ⊠
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Type: Depth (in Remarks: No /DROLOG Wetland Hy Primary India Surface High Wa Saturatio Saturatio Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely	o hydric soil indica o hydric soil indicator cators (minimum o Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aeria / Vegetated Conca	ators rs: <u>of one requ</u> al Imagery ave Surfac	(B7) e (B8)	eck all that apply) U Water-Staine 1, 2, 4A, Salt Crust (B Aquatic Invei Hydrogen Su Oxidized Rhi Presence of Recent Iron I Stunted or S Other (Expla	ed Leaves (B9 and 4B) i11) iftebrates (B13 ilfide Odor (C izospheres alc Reduced Iron Reduction in T tressed Plants in in Remarks) (except MLI)) ng Living Roc (C4) iilled Soils (C6 5 (D1) (LRR A)	Hydric Soil	Present? Yes No ⊠ Addary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Type: Depth (in Remarks: No /DROLOG ///////////////////////////////////	o hydric soil indica o hydric soil indica o hydric soil indica of hydric soil indica of hydric soil indica of hydric soil indicator cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) oon (A3) larks (B1) nt Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aeria / Vegetated Conca	ators rs: <u>of one requ</u> al Imagery ave Surfac	(B7) e (B8)	eck all that apply) U Water-Staine 1, 2, 4A, Salt Crust (B Aquatic Invei Hydrogen Su Oxidized Rhi Presence of Recent Iron I Stunted or S Other (Expla	ed Leaves (B9 and 4B) 11) rtebrates (B13 ulfide Odor (C ⁻ izospheres alc Reduced Iron Reduced Iron Reduction in T tressed Plants in in Remarks) (except MLI)) I) ing Living Roc (C4) iilled Soils (C6 ; (D1) (LRR A)	Hydric Soil Second RA W D D Sots (C3) D Si F) R	Present? Yes No X hdary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Type: Depth (in Remarks: No /DROLOG //DROL	o hydric soil indica o hydric soil indica o hydric soil indica of hydric soil indica of hydric soil indica of hydric soil indicator cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aeria / Vegetated Conca rvations: ter Present?	ators rs: of one requ al Imagery ave Surfac Yes	(B7) e (B8) No 🖂	eck all that apply) U Water-Staine 1, 2, 4A, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi Presence of Recent Iron I Stunted or S Other (Expla	ed Leaves (B9 and 4B) 11) rtebrates (B13 ilfide Odor (C izospheres alc Reduced Iron Reduced Iron Reduction in T tressed Plants in in Remarks) (except MLI)))))))) (C4) iilled Soils (C6 5 (D1) (LRR A)	Hydric Soil Seco RA D D D D Sots (C3) G S S) G FA S S S C S S C S S C S S C S S S S S S S S S S S S S	Present? Yes No X hdary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Type: Depth (in Remarks: No (DROLOG Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Sedimer Algal Ma Drift Dep Algal Ma Sedimer Surface Water Field Obser Surface Water Water Table	Aches): o hydric soil indica o hydric soil indica of hydric soil indica of hydric soil indica of hydric soil indicator cators (minimum of water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aeria v Vegetated Conca vations: ter Present?	ators rs: <u>of one requ</u> Al Imagery ave Surfac Yes Yes	(B7) e (B8) No ⊠ No ⊠	eck all that apply) U Water-Staine 1, 2, 4A, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi Presence of Recent Iron I Stunted or S Other (Expla) Depth (inches): Depth (inches):	ed Leaves (B9 and 4B) i11) rtebrates (B13 ilfide Odor (C izospheres alc Reduced Iron Reduced Iron Reduction in T tressed Plants in in Remarks) (except MLI) (except MLI))) (C4) illed Soils (C6 5 (D1) (LRR A)	Hydric Soil Seco RA D D D D Sots (C3) G S S) G F S S C3 C3 C3 C3 C3 C3 C3 C3 C3 C3	Present? Yes No X hdary Indicators (2 or more required) Atter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Type: Depth (in Remarks: No /DROLOG Wetland Hy Primary India Surface High Wa Saturatio Saturatio Water M Sedimer Surface Algal Ma Drift Dep Algal Ma Surface Surface Surface Water Water Table Saturation P	aches): o hydric soil indica o hydric soil indica o hydric soil indica o hydric soil indica of the soil of the solution of the soil of the solution of	ators rs: pf one requ al Imagery ave Surfac Yes Yes Yes Yes	(B7) :e (B8) No ⊠ No ⊠ No ⊠	eck all that apply) U Water-Staine 1, 2, 4A, Salt Crust (B Aquatic Invei Hydrogen Su Oxidized Rhi Presence of Recent Iron I Stunted or S' Other (Expla) Depth (inches): Depth (inches):	ed Leaves (B9 and 4B) i11) itebrates (B13 ulfide Odor (C izospheres alc Reduced Iron Reduction in T tressed Plants in in Remarks) (except MLI) (except MLI) ong Living Roc (C4) (C4) (C4) (D1) (LRR A) Wet	Hydric Soil Seco RA W D D D S ots (C3) G S S Fi Fi Hydrolog	Present? Yes □ No ⊠ ndary Indicators (2 or more required) (ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7) y Present? Yes □ No ⊠

Remarks: No indicators of hydrology

Project/Site: Cumberland Segale	City/County: King Count	y	Sampling Date: <u>12/3/19</u>
Applicant/Owner: Segale		State: WA	Sampling Point: <u>SP6</u>
Investigator(s): Kolten Kosters, Will Russack	Section, Tow	nship, Range: <u>T.21N R.0</u>	7E S.15NW
Landform (hillslope, terrace, etc.): slope	Local relief (concave, c	onvex, none): <u>Convex</u>	Slope (%): <u>1-3</u>
Subregion (LRR): NW Forest Lat	: <u>47.3086</u>	Long: <u>-121.9060</u>	Datum: WGS 84
Soil Map Unit Name: Barneston gravelly ashy coarse sandy loam		NWI classificati	on: <u>None</u>
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes 🛛 No 🗌 (If r	no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology significant	tly disturbed? Are "Norr	mal Circumstances" prese	ent? Yes 🛛 No 🗌
Are Vegetation, Soil, or Hydrology naturally p	problematic? (If needed	l, explain any answers in	Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ving sampling point loo	cations, transects,	important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes □ No ⊠ Yes □ No ⊠ Yes □ No ⊠	Is the Sampled Area within a Wetland?	Yes 🔲 No 🖾
Remarks: 15B Test Pit			

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>5 m</u>)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1. Acer macrophyllum (big-leaf maple)	20	<u>Y</u>	FACU	That Are OBL, FACW, or FAC: 2 (A)
2. Pseudotsuga menziesii (Douglas fir)	20	Y	FACU	Total Number of Dominant
3. Alnus rubra (red alder)	20	Y	FAC	Species Across All Strata: <u>5</u> (B)
4				Demonst of Dominant Chaption
	60	= Total C	over	That Are OBL, FACW, or FAC: 40 (A/B)
Sapling/Shrub Stratum (Plot size: 3 m)				
1. Rubus spectabilis (salmonberry)	50	<u>Y</u>	FAC	Prevalence Index worksheet:
2. Rubus ursinus (trailing blackberry)	10	<u>N</u>	FACU	Total % Cover of: Multiply by:
3. Acer circinatum (vine maple)	10	<u>N</u>	FAC	OBL species x 1 =
4				FACW species x 2 =
5				FAC species x 3 =
	70	= Total C	over	FACU species x 4 =
Herb Stratum (Plot size: <u>3 m</u>)				UPL species x 5 =
1. Polystichum munitum (Sword fern)	20	Y	FACU	Column Totals: (A) (B)
2				
3				Prevalence Index = B/A =
4				Hydrophytic Vegetation Indicators:
5				1 - Rapid Test for Hydrophytic Vegetation
6.				2 - Dominance Test is >50%
7.				☐ 3 - Prevalence Index is ≤3.0 ¹
8				4 - Morphological Adaptations ¹ (Provide supporting
9				data in Remarks or on a separate sheet)
10.				5 - Wetland Non-Vascular Plants
11.				Problematic Hydrophytic Vegetation ¹ (Explain)
	20	= Total C	over	¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 3 m)				be present, unless disturbed of problematic.
1				
2				Hydrophytic Vegetation
		= Total C	over	Present? Yes 🗌 No 🖂
% Bare Ground in Herb Stratum 60				
Remarks:				

Sampling Point: SP6

Depth (inchos)	Matrix Color (moist)	<u>%</u>	olor (moist)	Redox	Features		1.002	Toytu	ro		Pomorko	
		<u></u>				<u>Type</u>			<u>.</u> _		Remarks	
)-2	<u>10YR 2/2</u>	100						Sandy	Loam			
2-12	<u>10YR 4/3</u>	100						<u>Sandy</u>	Loam			
Type: C=C	Concentration, D=Depl	etion, RM=F	Reduced Mat	rix, CS=	Covered	or Coate	ed Sand G	irains.	² Loc	ation: PL=I	Pore Lining,	M=Matrix.
lydric Soil	Indicators: (Applica	able to all L	RRs, unless	otherw	ise note	ed.)		lı	ndicato	rs for Prob	lematic Hye	dric Soils ³ :
Histosol	(A1)		Sandy Re	dox (S5)			Ľ] 2 cm	Muck (A10)	
Histic E	pipedon (A2)		Stripped N	latrix (S	6)				Red	Parent Mate	erial (TF2)	
Black H	istic (A3)] Loamy Μι	icky Mir	ieral (F1)	(except	t MLRA 1)	Ľ] Very	Shallow Da	irk Surface ((TF12)
Hydroge	en Sulfide (A4)		Loamy Gl	eyed Ma	atrix (F2)			Ľ	Othe	r (Explain ir	n Remarks)	
Deplete	d Below Dark Surface	(A11)	Depleted I	Matrix (I	-3)							
Thick Da	ark Surface (A12)		Redox Da	rk Surfa	ice (F6)			3	Indicato	rs of hydrop	hytic vegeta	ation and
Sandy N	/lucky Mineral (S1)		Depleted	Dark Su	rface (F7	7)			wetlar	nd hydrolog	y must be p	resent,
Sandy C	Eleyed Matrix (S4)		Redox De	pressio	ns (F8)				unless	s disturbed	or problema	itic.
Restrictive	Layer (if present):											
Туре:												
Depth (ir	nches):							Hydi	ric Soil	Present?	Yes 🗌 🛛	No 🖂
Remarks: n	o hydric soil indicators							1				
DROLOG	GY											
Wetland Hy	/drology Indicators:											
۔ Primary Indi	icators (minimum of or	ne required;	check all tha	t apply)					Secon	dary Indica	tors (2 or me	ore required)
☐ Surface	Water (A1)		□ Wate	r-Staine	ed Leave	s (B9) (e	xcept ML	RA	ΠWa	ater-Stained	Leaves (B	9) (MLRA 1.
High W	ater Table (A2)		1	2 44	and 4B)	0 (20) (0				4A, and 4	B)	<i>s)</i> (<u>-</u> ,
_ Ingil We	on $(\Delta 3)$		D Salt (Crust (B	(11)					ainana Patt	erns (B10)	
					-11) rtobrotoo	(D12)				alliage i all	Votor Toble	$\langle \mathbf{C} \mathbf{a} \rangle$
				lic inve	itebrates	(DI3)				y-Season v		(02)
	nt Deposits (B2)		∐ Hydr	ogen St	Jitide Odo	or (C1)			∐ Sa	turation Vis	idie on Aeri	ai imagery (C
_ Drift De	posits (B3)		∐ Oxidi	zed Rhi	zosphere	es along	Living Roo	ots (C3)	∐G€	eomorphic F	Position (D2))
Algal Ma	at or Crust (B4)		Pres	ence of	Reduced	I Iron (C4	4)		🗌 Sh	allow Aquit	ard (D3)	
Iron Dep	posits (B5)		🗌 Rece	nt Iron I	Reductio	n in Tille	d Soils (Ce	5)	🗌 FA	C-Neutral	Fest (D5)	
Surface	Soil Cracks (B6)		Stuni	ed or S	tressed F	Plants (D	1) (LRR A	.)	🗌 Ra	ised Ant M	ounds (D6)	(LRR A)

Inundation Visible on Aerial Imagery (B7)		Other (Explain in Remarks)	Frost-H	leave Hummocks (D7)	
Sparsely Vegetated Conca	ave Surfac	e (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 Pres	sent? Yes 🗌 No 🛛
Describe Recorded Data (stre	am gauge	, monitor	ing well, aerial photos, previous inspec	ions), if available:	
Remarks: no indicators of hyd	rology				

Project/Site: Cumberland Segale	City/County	King County	Sampling Date: <u>12/10/19</u>
Applicant/Owner: Segale		State: WA	Sampling Point: SP7
Investigator(s): Kolten Kosters, Will Russack		Section, Township, Range: <u>T.21N R</u>	.07E S.09SW
Landform (hillslope, terrace, etc.): slope	Local relief	(concave, convex, none): <u>Convex</u>	Slope (%): <u>5-7</u>
Subregion (LRR): NW Forest	Lat: <u>47.3144</u>	Long: <u>-121.9311</u>	Datum: WGS 84
Soil Map Unit Name: Barneston gravelly ashy coarse	sandy loam	NWI classifica	ation: <u>None</u>
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" pre	sent? Yes 🛛 No 🗌
Are Vegetation, Soil, or Hydrology	_ naturally problematic?	(If needed, explain any answers i	n Remarks.)
SUMMARY OF FINDINGS – Attach site r	map showing sampling	point locations, transects	, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes □ No ⊠ Yes □ No ⊠ Yes □ No ⊠	Is the Sampled Area within a Wetland? Yes No No
Remarks: 9C Test Pit		

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>5 m</u>)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1. <u>Pseudotsuga menziesii (Douglas fir)</u>	80	<u>Y</u>	FACU	That Are OBL, FACW, or FAC: <u>1</u> (A)
2. Thuja plicata (western red cedar)	10	N	FAC	Total Number of Dominant
3				Species Across All Strata: <u>4</u> (B)
4				
	90	= Total C	over	Percent of Dominant Species That Are OBL_EACW_ or EAC: 25 (A/B)
Sapling/Shrub Stratum (Plot size: 3 m)				
1. Gaultheria shallon (salal)	60	<u>Y</u>	FACU	Prevalence Index worksheet:
2. Acer circinatum (vine maple)	30	<u>Y</u>	FAC	Total % Cover of: Multiply by:
3. Holodiscus discolor (oceanspray)	5	N	FACU	OBL species x 1 =
4				FACW species x 2 =
5				FAC species x 3 =
	95	= Total C	over	FACU species x 4 =
Herb Stratum (Plot size: <u>1 m</u>)				UPL species x 5 =
1. Polystichum munitum (Sword fern)	5	Y	FACU	Column Totals: (A) (B)
2				
3				Prevalence Index = B/A =
4.				Hydrophytic Vegetation Indicators:
5.				1 - Rapid Test for Hydrophytic Vegetation
6.				□ 2 - Dominance Test is >50%
7.				☐ 3 - Prevalence Index is ≤3.0 ¹
8.				4 - Morphological Adaptations ¹ (Provide supporting
9				data in Remarks or on a separate sheet)
10				5 - Wetland Non-Vascular Plants ¹
10				Problematic Hydrophytic Vegetation ¹ (Explain)
····	5	- Total C		¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 1 m)	<u>.</u>		Over	be present, unless disturbed or problematic.
1.				
2.				Hydrophytic Vegetation
		- Total C	over	Present? Yes \Box No \boxtimes
% Bare Ground in Herb Stratum <u>5</u>		- 10(0) 0	0701	
Remarks:				

Sampling Point: SP7

(inches) Color (moist)	%	Colo	or (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks
0-6 10YR 2/1							Gr.S.L	
5-12+ 10YR 3/4							Gr.S.I	cobbles 2-4"
<u></u>								
	·							
Type: C=Concentration, D	=Depletion,	RM=Red	luced Matrix, C	S=Covered	or Coate	ed Sand C	rains. ² L	ocation: PL=Pore Lining, M=Matrix.
lydric Soil Indicators: (A	pplicable to	all LRR	s, unless othe	rwise note	ed.)		Indica	tors for Problematic Hydric Soils ³ :
Histosol (A1)			Sandy Redox (S5)			☐ 2 c	m Muck (A10)
Histic Epipedon (A2)			Stripped Matrix	(S6)	(d Parent Material (TF2)
_ Black Histic (A3)			Loamy Gloved	Motrix (E2)	except	WILKA I)		Ty Shallow Dark Surface (TFT2)
Depleted Below Dark S	urface (A11)		Depleted Matri	(F3)				
Thick Dark Surface (A1	2)		Redox Dark Su	rface (F6)			³ Indica	tors of hydrophytic vegetation and
Sandy Mucky Mineral (2) S1)		Depleted Dark	Surface (F7	7)		wet	land hydrology must be present.
☐ Sandy Gleved Matrix (S	54)		Redox Depress	ions (F8)	,		unle	ess disturbed or problematic.
Restrictive Laver (if prese	ent):		•	()				
Type:								
Type: Depth (inches):							Hydric So	il Present? Yes 🗌 No 🛛
Type: Depth (inches): Remarks: no hydric soil ind	icators						Hydric So	il Present? Yes 🗌 No 🛛
Type: Depth (inches): Remarks: no hydric soil ind	icators						Hydric So	il Present? Yes 🗌 No 🛛
Type: Depth (inches): Remarks: no hydric soil ind	icators						Hydric So	il Present? Yes 🗌 No 🛛
Type: Depth (inches): Remarks: no hydric soil ind	icators						Hydric So	oil Present? Yes 🗌 No ⊠
Type: Depth (inches): Remarks: no hydric soil ind	icators						Hydric So	oil Present? Yes 🗌 No ⊠
Type: Depth (inches): Remarks: no hydric soil ind DROLOGY Netland Hydrology Indica	icators						Hydric So	oil Present? Yes 🗌 No 🛛
Type: Depth (inches): Remarks: no hydric soil ind DROLOGY Netland Hydrology Indica Primary Indicators (minimu	icators Itors: n of one req	uired; ch	eck all that app	ly)			Hydric So	ondary Indicators (2 or more required)
Type: Depth (inches): Remarks: no hydric soil ind DROLOGY Vetland Hydrology Indica Primary Indicators (minimur Surface Water (A1)	icators itors: m of one req	uired; ch	eck all that app	ly) ined Leave:	s (B9) (e	xcept ML	Hydric So	oil Present? Yes ☐ No ⊠ ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1,
Type: Depth (inches): Remarks: no hydric soil ind DROLOGY Vetland Hydrology Indica Primary Indicators (minimur Surface Water (A1) High Water Table (A2)	icators Itors: m of one req	uired; ch	eck all that app □ Water-Sta 1, 2, 4	ly) ined Leaves	s (B9) (e	xcept ML	Hydric So	oil Present? Yes ☐ No ⊠ ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B)
Type: Depth (inches): Remarks: no hydric soil ind DROLOGY Vetland Hydrology Indica Primary Indicators (minimur Surface Water (A1) High Water Table (A2) Saturation (A3)	icators ntors: m of one req	uired; ch	eck all that app ☐ Water-Sta 1, 2, 4 ☐ Salt Crust	ly) ined Leaves A, and 4B) (B11)	s (B9) (e	xcept ML	Hydric So	oil Present? Yes ☐ No ⊠ ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10)
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Type: Depth (inches): Remarks: no hydric soil ind DROLOGY Netland Hydrology Indica Primary Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Inundation Visible on Ac	icators itors: m of one req) erial Imagery ncave Surfac	uired; ch	eck all that app Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Irc Stunted o Other (Ex	ly) ined Leaves A, and 4B) (B11) vertebrates Sulfide Odd Rhizosphere of Reduced in Reduction Stressed F blain in Ren	s (B9) (e (B13) or (C1) es along H Iron (C4 n in Tille Plants (D narks)	Living Roo) d Soils (Ci 1) (LRR A	Hydric So Sec RA	ondary Indicators (2 or more required) water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
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Remarks: no indicators of hydrology

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

(includes capillary fringe)

Project/Site: Cumberland Segale	City/County: King C	ounty	Sampling Date: <u>12/10/19</u>
Applicant/Owner: Segale		State: WA	Sampling Point: SP8
Investigator(s): Kolten Kosters, Will Russack	Section,	Township, Range: T.21N R.0	07E S.09SW
Landform (hillslope, terrace, etc.): slope	Local relief (conca	ve, convex, none): <u>Convex</u>	Slope (%): <u>1-3</u>
Subregion (LRR): NW Forest	Lat: <u>47.3151</u>	Long: <u>-121.9233</u>	Datum: WGS 84
Soil Map Unit Name: Barneston gravelly ashy coarse sandy I	oam	NWI classificat	tion: <u>None</u>
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 signi	ficantly disturbed? Are	"Normal Circumstances" pres	ent? Yes 🛛 No 🗌
Are Vegetation, Soil, or Hydrology nature	ally problematic? (If ne	eded, explain any answers in	Remarks.)
SUMMARY OF FINDINGS – Attach site map s	howing sampling poin	t locations, transects,	important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes □ No ⊠ Yes □ No ⊠ Yes □ No ⊠	Is the Sampled Area within a Wetland?	Yes 🔲 No 🖾
Remarks: 9B Test Pit			

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>5 m</u>)	% Cover	Species?	Status	Number of Dominant Species
1. <u>Pseudotsuga menziesii (Douglas fir)</u>	50	Y	FACU	That Are OBL, FACW, or FAC: 0 (A)
2. Prunus virginiana (western chokecherry)	30	Y	FACU	Total Number of Dominant
3. Acer macrophyllum (bigleaf maple)	5	Ν	FACU	Species Across All Strata: <u>6</u> (B)
4				Demonst of Dominant Spacing
Sanling/Shruh Stratum (Blat size: 2 m)	85	= Total C	over	That Are OBL, FACW, or FAC: 0 (A/B)
<u>Saping/Siriub Stratum</u> (Fiot size, <u>Siri</u>)	20	V		Prevalence Index worksheet:
1. <u>Gauthena shallon (sala)</u>	<u>30</u>	<u>r</u>		Total % Cover of: Multiply by:
2. <u>Manonia nervosa (duil oregon-grape)</u>	<u>30</u>	<u>Y</u>	FACU	
3. Acer circinatum (vine maple)	5	<u>N</u>	FAC	
4. Prunus virginiana (western chokecherry)	5	N	FACU	FACW species x 2 =
5. Vaccinium parvifolium (red huckleberry)	3	<u>N</u>	FACU	FAC species x 3 =
	<u>73</u>	= Total C	over	FACU species x 4 =
Herb Stratum (Plot size: <u>3 m</u>)				UPL species x 5 =
1. Polystichum munitum (Sword fern)	20	<u>Y</u>	FACU	Column Totals: (A) (B)
2. Pteridium aquilinum (bracken fern)	10	<u>Y</u>	FACU	
3				Prevalence Index = B/A =
4				Hydrophytic Vegetation Indicators:
5				1 - Rapid Test for Hydrophytic Vegetation
6				2 - Dominance Test is >50%
7.				☐ 3 - Prevalence Index is ≤3.0 ¹
8				4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
9		·		☐ 5 - Wetland Non-Vascular Plants ¹
10		·		Problematic Hydrophytic Vegetation ¹ (Explain)
11		·		¹ Indicators of bydric soil and wetland bydrology must
Woody Vine Stratum (Plot size: <u>3 m</u>)	<u>30</u>	= Total C	over	be present, unless disturbed or problematic.
1				Underschutig
2				Hydropnytic Vegetation
% Bare Ground in Herb Stratum <u>10</u>		= Total C	over	Present? Yes 🗌 No 🛛
Remarks: Musci spp. 10% Cover				

Sampling Point: SP8

(inches)	Color (moist)	%	Color (moist)	<u>%</u> Type	¹ Loc ²	Texture	Remarks
0-5	<u>10YR 2/1</u>	100				Sandy Loa	<u>m</u>
5-12+	10YR 3/4	100				Gr.S.L	
Type: C=C	Concentration, D=De	pletion, RN	/=Reduced Matrix	CS=Covered or Co	ated Sand G	irains. ² l	ocation: PI =Pore Lining, M=Matrix,
lydric Soil	Indicators: (Appli	cable to a	II LRRs, unless c	otherwise noted.)		Indica	ators for Problematic Hydric Soils ³ :
] Histosol	(A1)		Sandy Red	ox (S5)		□ 2	cm Muck (A10)
] Histic E	pipedon (A2)		Stripped Ma	trix (S6)		🗌 Re	ed Parent Material (TF2)
Black H	istic (A3)		Loamy Muc	ky Mineral (F1) (exce	ept MLRA 1)		ery Shallow Dark Surface (TF12)
_ Hydrog∉ ⊐ Danlata	en Sulfide (A4)	() ()	Loamy Gley	red Matrix (F2)			ther (Explain in Remarks)
	d Below Dark Surfac	ce (A11)		atrix (F3) Surface (F6)		³ India	ators of hydrophytic vogotation and
Sandy N	Aucky Mineral (S1)			ark Surface (F7)		we	tland hydrology must be present.
Sandy G	Gleved Matrix (S4)		Redox Depi	ressions (F8)		un	less disturbed or problematic.
estrictive	Layer (if present):		· · · ·				-
Туре:	, , ,		_				
Type: Depth (ir Remarks: no	nches): o hydric soil indicato	prs	-			Hydric S	oil Present? Yes 🗌 No 🛛
Type: Depth (ir Remarks: no	nches): o hydric soil indicato	ors	-			Hydric So	oil Present? Yes 🗌 No 🛛
Type: Depth (ir Remarks: no	nches): o hydric soil indicato	ors	-			Hydric S	oil Present? Yes 🗌 No 🛛
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Type: Depth (ir Remarks: no DROLOC Vetland Hy Primary Indi Surface High Wa	aches): o hydric soil indicato GY rdrology Indicators icators (minimum of Water (A1) ater Table (A2)	ors :: one requir	ed: check all that	apply) Stained Leaves (B9) 2, 4A, and 4B)	(except ML	Hydric So	oil Present? Yes No 🛛 condary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B)
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Type: Depth (ir Remarks: no DROLOC Vetland Hy Primary Indi Surface High Wa Saturati Water M Sedimei Drift Dej Algal Ma	o hydric soil indicators o hydric soil indicators ficators (minimum of Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	ors s: one requir	ed: check all that Water- 1, 2 Salt Cr Aquati Hydrog Oxidize Preser	apply) Stained Leaves (B9) 2, 4A, and 4B) ust (B11) c Invertebrates (B13) gen Sulfide Odor (C1 ed Rhizospheres alon the of Reduced Iron (thron Reduction in Ti	(except MLI) ng Living Roc C4) lled Soils (C6	Hydric So Hydric So So Hydric So So Hydric So So Hydric So So Hydric So So Hydric So So Hydric So So Hydric So So So So So So So So So So	oil Present? Yes No 🛛 condary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
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Remarks: no indicators of hydrology

Project/Site: Cumberland Segale	City/County	King County	Sampling Date: 12/10/19
Applicant/Owner: Segale		State: WA	Sampling Point: SP9
Investigator(s): Kolten Kosters, Will Russack		Section, Township, Range: T.21N R.	.07E S.09SE
Landform (hillslope, terrace, etc.): slope	Local relief	(concave, convex, none): <u>Convex</u>	Slope (%): <u>1-3</u>
Subregion (LRR): NW Forest	Lat: <u>47.3175</u>	Long: <u>-121.9199</u>	Datum: WGS 84
Soil Map Unit Name: Barneston gravelly ashy coarse s	sandy loam	NWI classifica	ation: <u>None</u>
Are climatic / hydrologic conditions on the site typical f	for this time of year? Yes 🛛	No 🔲 (If no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology	_ significantly disturbed?	Are "Normal Circumstances" pre	sent? Yes 🛛 No 🗌
Are Vegetation, Soil, or Hydrology	_ naturally problematic?	(If needed, explain any answers i	n Remarks.)
SUMMARY OF FINDINGS – Attach site n	nap showing sampling	point locations, transects	, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes □ No ⊠ Yes □ No ⊠ Yes □ No ⊠	Is the Sampled Area within a Wetland?	Yes 🔲 No 🖾
Remarks: 9D Test Pit			

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>5 m</u>)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1. <u>Pseudotsuga menziesii (Douglas fir)</u>	80	<u>Y</u>	FACU	That Are OBL, FACW, or FAC: <u>1</u> (A)
2				Total Number of Dominant
3				Species Across All Strata: 3 (B)
4.				
	80	= Total C	over	Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: <u>3 m</u>)		10101-0		$\frac{111}{111} \text{ Are OBL, FACW, of FAC. } \frac{33}{111} (A/B)$
1. Acer circinatum (vine maple)	30	Y	FAC	Prevalence Index worksheet:
2. Tsuga heterophylla (western hemlock)	5	N	FACU	Total % Cover of: Multiply by:
3. Rubus ursinus (trailing blackberry)	5	N	FACU	OBL species x 1 =
4				FACW species x 2 =
5.				FAC species x 3 =
	40	= Total C	over	FACU species x 4 =
Herb Stratum (Plot size: 3 m)				UPL species x 5 =
1. Polystichum munitum (Sword fern)	40	Y	FACU	Column Totals: (A) (B)
2. Blechnum spicant (deer fern)	3	N	FAC	
3. Pteridium aquilinum (bracken fern)	1	N	FACU	Prevalence Index = B/A =
4				Hydrophytic Vegetation Indicators:
5.				1 - Rapid Test for Hydrophytic Vegetation
6.				□ 2 - Dominance Test is >50%
7.				☐ 3 - Prevalence Index is ≤3.0 ¹
8.				4 - Morphological Adaptations ¹ (Provide supporting
9				data in Remarks or on a separate sheet)
10				5 - Wetland Non-Vascular Plants ¹
11				Problematic Hydrophytic Vegetation ¹ (Explain)
····	11	– Total C	over	¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 3 m)	<u></u>	= 10tal 0	0001	be present, unless disturbed or problematic.
1.				
2.				Hydrophytic
		= Total C	over	Present? Yes \Box No \boxtimes
% Bare Ground in Herb Stratum 20				
Remarks:				

Sampling Point: SP9

4 10YR 2/1 100	(inches)	Color (moist)	%	Color (moist) %	Type ¹	Loc ²	Texture		Remarks
12+ 10YR 3/3 100	0-4	10YR 2/1	100				Sandy Loa	am	
Image: Image: Image: Image: Image: Image: Image: Image: Image: Image: Image: Image: Image: Image: Image: Image:	4-12+	10YR 3/3	100				Gr.S.I		
image:									
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. *Location: PL=Pore Lining, M=Matrix, variable of the context of th									
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ?Location: PL=Pore Lining, M=Matrix, ydric Soil Indicators (Applicable to all LRRs, unless otherwise noted.) Indicators (Applicable to all LRRs, unless otherwise noted.) Histics (A1) Stripped Matrix (S5) 2 cm Muck (A10) Histics (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F3) Other (Explain in Remarks) Depleted Delow Dark Surface (A11) Depleted Matrix (F3) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, unless disturbed or problematic. Setrictive Layer (ff present): Type:									
yge: C=Loncentration, D=Lepieton, rM=reduced Matrix, CS=Covered of Coated sand Grains. T=2=Pote Lining, M=Matrix. Indicators is (Applicable to all LRRs, unless otherwise noted.) Histic Epipedon (A2) Sandy Redox (S5) C arm Muck (A10) Histic Epipedon (A2) C arm Muck (A10) Black Histic (A3) C arm Muck (Mineral (F1) (except MLRA 1) Very Shalow Dark Surface (TF12) Hydrogen Sulfide (A4) C army Mucky Mineral (F1) (except MLRA 1) Very Shalow Dark Surface (TF12) Hydrogen Sulfide (A4) C army Mucky Mineral (S1) Depleted Matrix (F2) Depleted Bedra Surface (F6) ³ Indicators of hydrophytic vegetation and sandy Cleyed Matrix (S4) Redox Dark Surface (F7) wetland hydrology must be present, Sandy Cleyed Matrix (S4) Redox Depressions (F8) Pepth (inches): Depth (inches): Pepth (inches): Indicators in hydric soil indicators								21	Dens Lisian M. Matsia
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	J Sandy N	Mucky Mineral (S1)		Depleted Dark Surface (F7)		W	etland hydrolo	gy must be present,
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Type:	Turner	Layer (if present):							
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Remarks: no indicators of hydrology

Project/Site: Cumberland Segale	City/County:	King County	Sampling Date: <u>12/10/19</u>
Applicant/Owner: Segale		State: WA	Sampling Point: SP10
Investigator(s): Kolten Kosters, Will Russack	s	Section, Township, Range: T.21N R.0	7E S.09SE
Landform (hillslope, terrace, etc.): flat	Local relief	(concave, convex, none): Convex	Slope (%): <u>1-2</u>
Subregion (LRR): <u>NW Forest</u>	Lat: <u>47.3165</u>	Long: <u>-121.9145</u>	Datum: WGS 84
Soil Map Unit Name: Barneston gravelly ashy coarse	sandy loam	NWI classificat	ion: <u>None</u>
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" prese	ent? Yes 🛛 No 🗌
Are Vegetation, Soil, or Hydrology	_ naturally problematic?	(If needed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS – Attach site r	map showing sampling	point locations, transects,	important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes □ No ⊠ Yes □ No ⊠ Yes □ No ⊠	Is the Sampled Area within a Wetland?	Yes 🔲 No 🖾
Remarks: 9A Test Pit			

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>5 m</u>)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1. <u>Pseudotsuga menziesii (Douglas fir)</u>	60	<u>Y</u>	FACU	That Are OBL, FACW, or FAC: 0 (A)
2. Tsuga heterophylla (western hemlock)	20	Y	FACU	Total Number of Dominant
3				Species Across All Strata: <u>5</u> (B)
4				Demonstrat Demoissed Operation
	80	= Total C	over	That Are OBL FACW, or FAC: 0 (A/B)
Sapling/Shrub Stratum (Plot size: 3 m)				(**2)
1. Gaultheria shallon (salal)	30	Y	FACU	Prevalence Index worksheet:
2. Tsuga heterophylla (western hemlock)	20	Υ	FACU	Total % Cover of: Multiply by:
3. Rubus spectabilis (salmonberry)	<u>10</u>	N	FAC	OBL species x 1 =
4				FACW species x 2 =
5				FAC species x 3 =
	60	= Total C	over	FACU species x 4 =
Herb Stratum (Plot size: <u>3 m</u>)				UPL species x 5 =
1. Polystichum munitum (Sword fern)	50	Υ	FACU	Column Totals: (A) (B)
2. Pteridium aquilinum (bracken fern)	10	N	FACU	
3				Prevalence Index = B/A =
4				Hydrophytic Vegetation Indicators:
5				1 - Rapid Test for Hydrophytic Vegetation
6.				□ 2 - Dominance Test is >50%
7.				☐ 3 - Prevalence Index is ≤3.0 ¹
8.				4 - Morphological Adaptations ¹ (Provide supporting
9				data in Remarks or on a separate sheet)
10				5 - Wetland Non-Vascular Plants ¹
11				Problematic Hydrophytic Vegetation ¹ (Explain)
····	60	– Total C	over	¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 3 m)	00	- 10lai C	Over	be present, unless disturbed or problematic.
1.				
2.				Hydrophytic Vogetation
		= Total C	over	Present? Yes No 🛛
% Bare Ground in Herb Stratum <u>5</u>		= 1 Star O		
Remarks:				

Sampling Point: SP10

Depth	Matrix		Red	ox Features		_	
(inches)	Color (moist)	<u>%</u> <u>Co</u>	olor (moist)	<u>% Type</u>		Textu	re Remarks
)-8	10YR 2/1	100				Loam	·
-16+	<u>10YR 2/2</u>	100				Gr.S.L	·
	-						
	-	<u> </u>					
		. <u> </u>					
	Concentration D-Den	letion RM-R	educed Matrix	S-Covered or Co	ated Sand G	raine	² ocation: PL-Pore Lining M-Matrix
lydric Soil	Indicators: (Applic	able to all LF	RRs, unless othe	erwise noted.)	ateu Sanu O	In In	ndicators for Problematic Hydric Soils ³ :
, ヿ Histosol	(A1)	Г	l Sandv Redox (, S5)		Г	☐ 2 cm Muck (A10)
Histic E	pipedon (A2)		Stripped Matrix	(S6)			Red Parent Material (TF2)
Black H	istic (A3)] Loamy Mucky I	Mineral (F1) (exce	pt MLRA 1)		Very Shallow Dark Surface (TF12)
Hydroge	en Sulfide (A4)		Loamy Gleyed	Matrix (F2)			Other (Explain in Remarks)
Deplete	d Below Dark Surface	∍(A11) 🗌	Depleted Matrix	< (F3)			
Thick D	ark Surface (A12)		Redox Dark Su	rface (F6)		³	ndicators of hydrophytic vegetation and
Sandy N	/lucky Mineral (S1)		Depleted Dark	Surface (F7)			wetland hydrology must be present,
_ Sandy (Gleyed Matrix (S4)	L	Redox Depress	sions (F8)			unless disturbed or problematic.
Restrictive	Layer (if present):						
Type:							
Depth (ir	nches):					Hydr	ic Soil Present? Yes 🗌 No 🛛
Remarks: n	o hydric soil indicator	3					
DROLO	GY						
Vetland Hy	drology Indicators:						
Primary Ind	icators (minimum of c	one required: (check all that and	lv)			Secondary Indicators (2 or more required)
	Water (A1)	<u>no roquirou, c</u>	₩ater-Sta	ined Leaves (B9)	(excent MI F	20	Water-Stained Leaves (B9) (MLRA 1
	$\operatorname{Mater}(A1)$			A and (AB)	(except ML)	~	A and AB)
_ High Wa □ Saturati	(A3)			(B11)			\Box Drainage Patterns (B10)
	Un (AS) Aarka (B1)			(DTT)			\square Dry Second Water Table (C2)
	nt Deperite (P2)			Sulfide Oder (C1			Div-Season Water Table (C2)
					l Na Livina Doo	to (C2)	
				Rnizospheres aloi		ts (C3)	
	at of Crust (B4)			or Reduced Iron (64)	`	
				n Reduction in Ti	iea Solis (C6)	
_ Surface	Soll Cracks (B6)	(57)		Stressed Plants	(D1) (LRR A)		Kaised Ant Mounds (D6) (LRR A)
inundat	on visible on Aerial I	nagery (B7)		Jiain in Remarks)			FIOST-HEAVE HUMMOCKS (D7)
·		0					

Inundation Visible on Aer	ial Imagery	(B7)	Other (Explain in Remarks)	Frost-Heave Humm	locks (D7)
Sparsely Vegetated Cond	cave Surface	e (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	3 🗌 No 🖾
Describe Recorded Data (stre	eam gauge,	monito	ring well, aerial photos, previous inspec	ctions), if available:	
Remarks: no indicators of hy-	drology				

Project/Site: Cumberland Segale	City/County:	King County	Sampling Date: <u>12/10/19</u>
Applicant/Owner: Segale		State: WA	Sampling Point: <u>SP11</u>
Investigator(s): Kolten Kosters, Will Russack	s	Section, Township, Range: <u>T.21N R.0</u>	7E S.15NW
Landform (hillslope, terrace, etc.): flat	Local relief	(concave, convex, none): Convex	Slope (%): <u>1-2</u>
Subregion (LRR): <u>NW Forest</u>	Lat: <u>47.3132</u>	Long: <u>-121.9099</u>	Datum: WGS 84
Soil Map Unit Name: Barneston gravelly ashy coarse	sandy loam	NWI classificati	ion: <u>None</u>
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" prese	ent? Yes 🛛 No 🗌
Are Vegetation, Soil, or Hydrology	_ naturally problematic?	(If needed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS – Attach site r	map showing sampling	point locations, transects,	important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes □ No ⊠ Yes □ No ⊠ Yes □ No ⊠	Is the Sampled Area within a Wetland?	Yes 🔲 No 🖾
Remarks: 15C Test Pit			

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>5 m</u>)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1. <u>Pseudotsuga menziesii (Douglas fir)</u>	80	Y	FACU	That Are OBL, FACW, or FAC: 0 (A)
2. Prunus virginiana (western chokecherry)	5	N	FACU	Total Number of Dominant
3				Species Across All Strata: <u>3</u> (B)
4				Barris (Damina) Oracia
	85	= Total C	over	That Are OBL FACW, or FAC: 0 (A/B)
Sapling/Shrub Stratum (Plot size: 3 m)				
1. Gaultheria shallon (salal)	50	Y	FACU	Prevalence Index worksheet:
2. Acer circinatum (vine maple)	5	<u>N</u>	FAC	Total % Cover of: Multiply by:
3				OBL species x 1 =
4				FACW species x 2 =
5	_			FAC species x 3 =
	55	= Total C	over	FACU species x 4 =
Herb Stratum (Plot size: <u>1 m</u>)				UPL species x 5 =
1. Polystichum munitum (Sword fern)	5	Y	FACU	Column Totals: (A) (B)
2				
3				Prevalence Index = B/A =
4				Hydrophytic Vegetation Indicators:
5.				1 - Rapid Test for Hydrophytic Vegetation
6.				□ 2 - Dominance Test is >50%
7.				☐ 3 - Prevalence Index is ≤3.0 ¹
8.				4 - Morphological Adaptations ¹ (Provide supporting
9				data in Remarks or on a separate sheet)
10		·		5 - Wetland Non-Vascular Plants ¹
11				Problematic Hydrophytic Vegetation ¹ (Explain)
· · · · · · · · · · · · · · · · · · ·	F	- Total C		¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 1 m)	<u> </u>		over	be present, unless disturbed or problematic.
<u> </u>				
2				Hydrophytic
		– Total C	over	Present? Yes \Box No \boxtimes
% Bare Ground in Herb Stratum <u>10</u>		- 101010	0401	
Remarks:				

Sampling Point: SP11

(inches) Color (moist	t) %	Color (moist)	<u>%</u> Ty	/pe ¹ Loc ²	Texture	Remarks
0-12+ <u>10YR 4/3</u>	100				<u>Gr.S.L</u>	
	D Depletion D					
lvdric Soil Indicators:	(Applicable to a	II LRRs. unless oth	erwise noted.)	Coaled Sand G	Indicat	ors for Problematic Hydric Soils ³ :
T Histosol (A1)		☐ Sandy Redox	(S5)		□ 2 cr	m Muck (A10)
Histic Epipedon (A2)		Stripped Matri	x (S6)			Parent Material (TF2)
Black Histic (A3)		Loamy Mucky	Mineral (F1) (e	xcept MLRA 1)	🗌 Ver	y Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4	.)	Loamy Gleyed	d Matrix (F2)		🗌 Oth	er (Explain in Remarks)
Depleted Below Dark	Surface (A11)	Depleted Matr	ix (F3)		0	
☐ Thick Dark Surface (A	A12)	Redox Dark S	urface (F6)		Indicat	ors of hydrophytic vegetation and
Sandy Mucky Mineral	(S1) (S4)		Surface (F7)		wetla	and hydrology must be present,
estrictive Laver (if pre-	(34) sent):		510115 (FO)		une	ss disturbed of problematic.
	sentj.					
Depth (inches):					Hydric Soi	l Present? Ves 🗆 No 🕅
		_			Hyunc Sol	
Pemarke: no hydric soil in	dicatore					
Remarks: no hydric soil in	ndicators					
Remarks: no hydric soil ir	ndicators					
Remarks: no hydric soil ir	ndicators				1	
Remarks: no hydric soil ir	ndicators					
Remarks: no hydric soil ir	ndicators					
Remarks: no hydric soil ir DROLOGY Vetland Hydrology India	cators:	ed: check all that an			Seco	ondary Indicators (2 or more required)
Remarks: no hydric soil ir DROLOGY Vetland Hydrology India Primary Indicators (minim	ndicators cators: num of one requir	ed; check all that ap	ply)	39) (excent MI		ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MI RA 1
DROLOGY Vetland Hydrology India Surface Water (A1) High Water Table (A2)	ndicators cators: num of one requir	ed; check all that ap ☐ Water-St	ply) ained Leaves (I	39) (except MLF	<u>Secc</u> RA □ V	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 44 and 48)
Remarks: no hydric soil ir DROLOGY Vetland Hydrology Indic Primary Indicators (minim) Surface Water (A1) High Water Table (A2) Saturation (A3)	ndicators cators: num of one requir 2)	ed; check all that ap ☐ Water-St 1, 2, ☐ Salt Crus	<u>ply)</u> ained Leaves (I 4A, and 4B) tt (B11)	39) (except MLF	<u>Secc</u> RA □ V	ondary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10)
Remarks: no hydric soil ir DROLOGY Vetland Hydrology India Primary Indicators (minim Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1)	ndicators cators: num of one requir	ed; check all that ap Water-St 1, 2, - Salt Crus Aquatic I	<u>ply)</u> ained Leaves (I 4A, and 4B) st (B11) nvertebrates (B	39) (except MLF 13)	<u>Secc</u> RA □ V □ □ □	ondary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Remarks: no hydric soil ir DROLOGY Vetland Hydrology India Primary Indicators (minim Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B	cators: num of one requir 2) 32)	ed; check all that ap Water-St 1, 2, - Salt Crus Aquatic I Hydrogei	ply) ained Leaves (I 4A, and 4B) it (B11) nvertebrates (B n Sulfide Odor (39) (except MLF 13) C1)	<u>Secc</u> RA □ V □ □ □ □	ondary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Gaturation Visible on Aerial Imagery (C
Remarks: no hydric soil ir DROLOGY Vetland Hydrology India Primary Indicators (minim Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3)	ndicators cators: hum of one requir 2) 32)	ed; check all that ap Water-St 1, 2, Salt Crus Aquatic I Hydroger Oxidized	<u>ply)</u> ained Leaves (I 4A, and 4B) it (B11) nvertebrates (B n Sulfide Odor (Rhizospheres ;	39) (except MLF 13) C1) along Living Roo	<u>Secc</u> RA □ V □ □ □ □ □ S ts (C3) □ G	ondary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Seomorphic Position (D2)
Remarks: no hydric soil ir DROLOGY Vetland Hydrology India Primary Indicators (minim) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4)	ndicators cators: hum of one requir 2) 32) 4)	red; check all that ap Water-St 1, 2, Salt Crus Aquatic I Hydroger Oxidized Presence	ply) ained Leaves (I 4A, and 4B) it (B11) nvertebrates (B n Sulfide Odor (Rhizospheres a e of Reduced Ird	39) (except MLF 13) (C1) along Living Roc on (C4)	<u>Secc</u> RA □ V □ □ □ 5 ts (C3) □ 6	ondary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Seomorphic Position (D2) Shallow Aquitard (D3)
Remarks: no hydric soil ir Remarks: no hydric soil ir DROLOGY Vetland Hydrology India Primary Indicators (minim Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	ndicators cators: hum of one requir 2) 32) 4)	ed; check all that ap Water-St Salt Crus Aquatic I Hydroger Oxidized Recent Ir	ply) ained Leaves (I 4A, and 4B) at (B11) nvertebrates (B n Sulfide Odor (Rhizospheres a of Reduced Int ron Reduction in	39) (except MLF 13) (C1) along Living Roc on (C4) n Tilled Soils (C6	<u>Secc</u> RA □ V □ □ □ S ts (C3) □ G □ S 1 S 1 S 1 S 1 S	andary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1 , 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) GC-Neutral Test (D5)
Remarks: no hydric soil ir Remarks: no hydric soil ir DROLOGY Wetland Hydrology India Primary Indicators (minim Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (B	ndicators cators: hum of one requir 2) 32) 4) B6)	ed; check all that ap Water-St 1, 2, - Salt Crus Aquatic I Hydroger Oxidized Presence Recent Ir Stunted of	ply) ained Leaves (I 4A, and 4B) at (B11) nvertebrates (B n Sulfide Odor (Rhizospheres a of Reduced In on Reduction in or Stressed Plan	39) (except MLF 13) C1) along Living Roc on (C4) n Tilled Soils (C6 nts (D1) (LRR A)	<u>Secc</u> RA □ V □ □ □ □ S ts (C3) □ G □ S 0 □ F 0 □ F	Andary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Seomorphic Position (D2) Shallow Aquitard (D3) (AC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Remarks: no hydric soil ir Remarks: no hydric soil ir DROLOGY Wetland Hydrology Indir Primary Indicators (minim Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (f Inundation Visible on	adicators cators: hum of one requir 2) 32) 4) B6) Aerial Imagery (E	ed; check all that ap Water-St 1, 2, 4 Salt Crus Aquatic I Hydroger Oxidized Presence Recent Ir Stunted of 37) Other (E)	ply) ained Leaves (I 4A, and 4B) it (B11) nvertebrates (B n Sulfide Odor (Rhizospheres a e of Reduced In on Reduction in or Stressed Plan kplain in Remar	39) (except MLF 13) C1) along Living Rod on (C4) n Tilled Soils (C6 nts (D1) (LRR A) ks)	Secc RA □ V □ □ □ □ □ □ □ S 1 S 1 S 0 □ F 0 □ F 0 □ F 0 □ F 0 □ F 0 □ F 0 □ F	ondary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Gaturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) (AC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Remarks: no hydric soil ir Remarks: no hydric soil ir DROLOGY Vetland Hydrology India Primary Indicators (minim) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated C	cators: num of one requir 2) 32) 4) B6) Aerial Imagery (E Concave Surface	red; check all that ap Water-St 3 Salt Crus Aquatic I Hydroger Oxidized Presence Recent Ir Stunted of 37) Other (Es (B8)	ply) ained Leaves (I 4A, and 4B) it (B11) nvertebrates (B n Sulfide Odor (Rhizospheres a of Reduced Ira on Reduction ir on Reduction ir or Stressed Plan kplain in Remar	39) (except MLF 13) C1) along Living Roo on (C4) n Tilled Soils (C6 nts (D1) (LRR A) ks)	<u>Secc</u> ZA □ V □ □ □ □ ts (C3) □ G □ S □ S □ S □ F □ F □ F □ F	Andary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Seomorphic Position (D2) Shallow Aquitard (D3) (AC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) (rost-Heave Hummocks (D7)
Remarks: no hydric soil ir Remarks: no hydric soil ir DROLOGY Vetland Hydrology India Primary Indicators (minim) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (F) Surface Soil Cracks (F) Sparsely Vegetated C	cators: num of one requir 2) 32) 4) B6) Aerial Imagery (E Concave Surface	ed; check all that ap Water-St 1, 2, 4 Salt Crus Aquatic I Hydroger Oxidized Presence Recent Ir Stunted of 37) Other (Ex (B8)	ply) ained Leaves (f 4A, and 4B) at (B11) nvertebrates (B n Sulfide Odor (Rhizospheres a of Reduced Ird on Reduction ir or Stressed Plai con Stressed Plai colain in Remar	39) (except MLF 13) (C1) along Living Rod on (C4) n Tilled Soils (C6 nts (D1) (LRR A) ks)	Secc RA □ V □ □ □ S ts (C3) □ G □ S 0 □ F 0 □ F	Andary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1 , 4A , and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) (AC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) (rost-Heave Hummocks (D7)
Remarks: no hydric soil ir Primary Indicators (minim Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated C Field Observations: Surface Water Present?	cators: cators: num of one requir 2) 32) 4) B6) Aerial Imagery (E Concave Surface Yes	ed; check all that ap	ply) ained Leaves (I 4A, and 4B) at (B11) nvertebrates (B n Sulfide Odor (Rhizospheres a of Reduced Ira on Reduction ir or Stressed Plan con Stressed Plan con Stressed Plan con Stressed Plan con Stressed Plan con Stressed Plan con Stressed Plan	39) (except MLF 13) C1) along Living Roc on (C4) n Tilled Soils (C6 nts (D1) (LRR A) ks)	Secc RA □ V □ □ □ S ts (C3) □ G □ S □ S □ S □ S □ F □ F	Andary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1 , 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) GC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) irost-Heave Hummocks (D7)
Primarks: no hydric soil ir 'DROLOGY Wetland Hydrology India Primary Indicators (minim Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (f Inundation Visible on Sparsely Vegetated C Field Observations: Surface Water Present? Water Table Present?	cators: cum of one requir 2) 32) 4) B6) Aerial Imagery (E Concave Surface Yes □ N Yes □ N	ed; check all that ap Water-St 1, 2, 4 Salt Crus Aquatic I Hydroger Oxidized Presence Recent Ir Stunted of 37) Other (E) (B8)	ply) ained Leaves (I 4A, and 4B) anvertebrates (B an Sulfide Odor (Rhizospheres a of Reduced Irr for Reduction in for Stressed Plan (plain in Remar es):	39) (except MLF 13) C1) along Living Roc on (C4) n Tilled Soils (C6 nts (D1) (LRR A) ks)	Secc RA □ V □ □ □ □ S ts (C3) □ G □ S 0 □ F 0 □ F	ondary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Seomorphic Position (D2) Shallow Aquitard (D3) (AC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

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

Remarks: no indicators of hydrology

Project/Site: Cumberland Segale	City/County	King County	Sampling Date:6/21/22		
Applicant/Owner: <u>Segale</u>		State: WA Sampling Point:			
Investigator(s): Will Russack, Kolten Kosters	:	Section, Township, Range: <u>T.21N</u>	R.07E S.21SW		
Landform (hillslope, terrace, etc.): slope	Local relief	(concave, convex, none): <u>Convex</u>	Slope (%): <u>1-3</u>		
Subregion (LRR): NW Forest	Lat: <u>47.2909</u>	Long: <u>-121.9303</u>	Datum: WGS 84		
Soil Map Unit Name: Barneston gravelly ashy coar	se sandy loam	NWI classification: None			
Are climatic / hydrologic conditions on the site typic	cal for this time of year? Yes 🛛	No 🔲 (If no, explain in Remarks	s.)		
Are Vegetation, Soil, or Hydrology	significantly disturbed?	Are "Normal Circumstances" p	resent? Yes 🛛 No 🗌		
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any answers	s in Remarks.)		
SUMMARY OF FINDINGS – Attach sit	e map showing sampling	point locations, transect	s, important features, etc.		
Hydrophytic Vegetation Present? Yes] No ⊠ Is ti	ne Sampled Area			

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes □ No ⊠ Yes □ No ⊠ Yes □ No ⊠	Is the Sampled Area within a Wetland?	Yes 🗌 No 🛛	
Remarks: Sample plot along propose	ed road alignment			

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>5 m</u>)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1. <u>Pseudotsuga menziesii (Douglas fir)</u>	<u>90</u>	<u>Y</u>	FACU	That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Dominant
3				Species Across All Strata: 4 (B)
4.				
	90	= Total C	over	Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: 3 m)				$\frac{11}{23}$
1. Rubus spectabilis (salmonberry)	20	Y	FAC	Prevalence Index worksheet:
2. Rubus ursinus (trailing blackberry)	10	Y	FACU	Total % Cover of: Multiply by:
3. Vaccinium parvifolium (red huckleberry)	5	N	FACU	OBL species x 1 =
4.				FACW species x 2 =
5.				FAC species x 3 =
	35	= Total C	over	FACU species x 4 =
Herb Stratum (Plot size: 3 m)				UPL species x 5 =
1. Polystichum munitum (sword fern)	60	Y	FACU	Column Totals: (A) (B)
2				
3.				Prevalence Index = B/A =
4.				Hydrophytic Vegetation Indicators:
5.				1 - Rapid Test for Hydrophytic Vegetation
6.				□ 2 - Dominance Test is >50%
7.				□ 3 - Prevalence Index is $\leq 3.0^1$
8.				4 - Morphological Adaptations ¹ (Provide supporting
9.				data in Remarks or on a separate sheet)
10				5 - Wetland Non-Vascular Plants ¹
11				Problematic Hydrophytic Vegetation ¹ (Explain)
····	60	– Total C	over	¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 3 m)	00	= 10tal 0	0001	be present, unless disturbed or problematic.
1.				
2.				Hydrophytic Vegetation
		= Total C	over	Present? Yes No 🛛
% Bare Ground in Herb Stratum <u>0</u>		- 100010	0.01	
Remarks:				

Sampling Point: SP12

ced Matrix, CS=Covered or , unless otherwise noted. andy Redox (S5) tripped Matrix (S6) bamy Mucky Mineral (F1) (bamy Gleyed Matrix (F2) epleted Matrix (F3)	<u></u>	G G G Sand Grain	iR.S.L
ced Matrix, CS=Covered or , unless otherwise noted. andy Redox (S5) tripped Matrix (S6) pamy Mucky Mineral (F1) (comy Gleyed Matrix (F2) epleted Matrix (F3)		Gi Gi Sand Grain Sand Grain	iR.S.L iR.S.L iR.S.L ins. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ : ☐ 2 cm Muck (A10) ☐ Red Parent Material (TF2) ☐ Very Shallow Dark Surface (TF12) ☐ Other (Explain in Remarks)
ced Matrix, CS=Covered or , unless otherwise noted. andy Redox (S5) tripped Matrix (S6) bamy Mucky Mineral (F1) (bamy Gleyed Matrix (F2) epleted Matrix (F3)		G	BR.S.L ns. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ : □ 2 cm Muck (A10) □ Red Parent Material (TF2) □ Very Shallow Dark Surface (TF12) □ Other (Explain in Remarks)
ced Matrix, CS=Covered or , unless otherwise noted. andy Redox (S5) tripped Matrix (S6) bamy Mucky Mineral (F1) (bamy Gleyed Matrix (F2) epleted Matrix (F3)	<u>or Coated S</u> 1.)		ns. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ : 2 cm Muck (A10) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
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ced Matrix, CS=Covered or , unless otherwise noted. andy Redox (S5) tripped Matrix (S6) pamy Mucky Mineral (F1) (o pamy Gleyed Matrix (F2) epleted Matrix (F3)	<u>or Coated S</u> 1.)		ns. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ : 2 cm Muck (A10) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
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ced Matrix, CS=Covered or , unless otherwise noted. andy Redox (S5) tripped Matrix (S6) bamy Mucky Mineral (F1) (bamy Gleyed Matrix (F2) epleted Matrix (F3)	or Coated S 1.) (except ML	Sand Grain	ns. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ : 2 cm Muck (A10) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
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ced Matrix, CS=Covered of , unless otherwise noted. andy Redox (S5) tripped Matrix (S6) pamy Mucky Mineral (F1) (pamy Gleyed Matrix (F2) epleted Matrix (F3)	or Coated S 1.) (except ML	Sand Grain	ns. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ : 2 cm Muck (A10) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
ced Matrix, CS=Covered of , unless otherwise noted. andy Redox (S5) tripped Matrix (S6) barry Mucky Mineral (F1) (e barry Gleyed Matrix (F2) epleted Matrix (F3)	or Coated <u>§</u> J.) (except ML	<u>Sand Grain</u> LRA 1)	 a. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: 2 cm Muck (A10) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
, unless otherwise noted. andy Redox (S5) tripped Matrix (S6) bamy Mucky Mineral (F1) (bamy Gleyed Matrix (F2) epleted Matrix (F3)	d.) (except ML	LRA 1)	Indicators for Problematic Hydric Soils ³ : 2 cm Muck (A10) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
andy Redox (S5) tripped Matrix (S6) pamy Mucky Mineral (F1) (pamy Gleyed Matrix (F2) epleted Matrix (F3)	(except ML	LRA 1)	 2 cm Muck (A10) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
tripped Matrix (S6) barny Mucky Mineral (F1) (barny Gleyed Matrix (F2) epleted Matrix (F3)	(except ML	LRA 1)	 Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
barny Mucky Mineral (F1) (barny Gleyed Matrix (F2) epleted Matrix (F3)	(except ML	LRA 1)	 Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
bamy Gleyed Matrix (F2) epleted Matrix (F3)			Other (Explain in Remarks)
epleted Matrix (F3)			
edox Dark Surface (F6)			³ Indicators of hydrophytic vegetation and
epleted Dark Surface (F7)	1		wetland hydrology must be present,
edox Depressions (F8)			unless disturbed or problematic.
		1	Hydric Soil Present? Yes 🗌 No 🖂

Primary Indicators (minimum of one required; check all that apply)					Secondary Indicators (2 or more required)	
Surface Water (A1) Water-Stained Leaves (B9) (except M			ot MLRA	Water-Stained Leaves (B9) (MLRA 1, 2,		
High Water Table (A2)			1, 2, 4A, and 4B)		4A, and 4B)	
Saturation (A3)			Salt Crust (B11)		Drainage Patterns (B10)	
Water Marks (B1)			Aquatic Invertebrates (B13)		Dry-Season Water Table (C2)	
Sediment Deposits (B2)			Hydrogen Sulfide Odor (C1)		Saturation Visible on Aerial Imagery (C9)	
□ Drift Deposits (B3) □ Oxidized Rhizospheres along Living F			ng Roots (C3)	Geomorphic Position (D2)		
Algal Mat or Crust (B4) Presence of Reduced Iron (C4)				Shallow Aquitard (D3)		
□ Iron Deposits (B5) □ Recent Iron Reduction in Tilled Soils (Cf			ils (C6)	FAC-Neutral Test (D5)		
□ Surface Soil Cracks (B6) □ Stunted or Stressed Plants (D1) (LRR		.RR A)	Raised Ant Mounds (D6) (LRR A)			
Inundation Visible on Aerial Imagery (B7)			Frost-Heave Hummocks (D7)			
Sparsely Vegetated Conc	ave Surface (B	38)				
Field Observations:						
Surface Water Present?	Yes 🗌 No		Pepth (inches):			
Water Table Present?	Yes 🗌 No		Depth (inches):			
Saturation Present? (includes capillary fringe)	Yes 🗌 No		Depth (inches):	Wetland Hy	ydrology Present? Yes 🗌 No 🛛	
Describe Recorded Data (stre	am gauge, mo	onitoring	well, aerial photos, previous inspec	tions), if availa	lable:	
Remarks: No indicators of hyd	drology					

Project/Site: Cumberland Segale	City/County	: King County Sa	ampling Date: <u>6/21/22</u>			
Applicant/Owner: <u>Segale</u>		State: WA State:	ampling Point: <u>SP13</u>			
Investigator(s): Will Russack, Kolten Kosters		Section, Township, Range: <u>T.21N R.07E</u>	S.21SW			
Landform (hillslope, terrace, etc.): slope	Local relie	f (concave, convex, none): <u>Convex</u>	Slope (%): <u>1-3</u>			
Subregion (LRR): <u>NW Forest</u>	Lat: <u>47.2909</u>	Long: <u>-121.9303</u>	Datum: WGS 84			
Soil Map Unit Name: Barneston gravelly ashy coarse	e sandy loam	NWI classification	n: <u>None</u>			
Are climatic / hydrologic conditions on the site typica	I 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 🗌				
re Vegetation, Soil, or Hydrology naturally problematic?		(If needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS – Attach site	map showing sampling	g point locations, transects, in	nportant features, etc.			
Hydrophytic Vegetation Present? Yes		he Compled Area				

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes ⊠ No ∐ Yes □ No ⊠ Yes □ No ⊠	Is the Sampled Area within a Wetland?	Yes 🗌 No 🛛
Remarks: Sample plot along proposed	d road alignment		

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>5 m</u>)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1. <u>Pseudotsuga menziesii (Douglas fir)</u>	40	Y	FACU	That Are OBL, FACW, or FAC: 5 (A)
2. Alnus rubra (red alder)	40	Y	FAC	Total Number of Dominant
3				Species Across All Strata: <u>6</u> (B)
4		. <u> </u>		Barris (Damina) Oracia
	80	= Total C	over	That Are OBL FACW, or FAC: 83 (A/B)
Sapling/Shrub Stratum (Plot size: 3 m)				(12)
1. Acer circinatu (vine maple)	<u>40</u>	<u>Y</u>	FAC	Prevalence Index worksheet:
2. Rubus spectabilis (salmonberry)	30	Y	FAC	Total % Cover of:Multiply by:
3. Sambucus racemosa (red elderberry)	<u>15</u>	N	FACU	OBL species x 1 =
4		. <u> </u>		FACW species x 2 =
5				FAC species x 3 =
	85	= Total C	over	FACU species x 4 =
Herb Stratum (Plot size: <u>3 m</u>)				UPL species x 5 =
1. Hydrophyllum tenuipes (Pacific waterleaf)	30	Y	FAC	Column Totals: (A) (B)
2. Carex deweyana (Dewey's sedge)	<u>30</u>	<u>Y</u>	FAC	
3. <u>Claytonia sp (sprinbeauty</u>	<u>15</u>	N	FAC	Prevalence Index = B/A =
4. Geranium robertianum (Herb Robert)	10	N	FACU	Hydrophytic Vegetation Indicators:
5. Ranunculus repens (creeping buttercup)	5	N	FAC	1 - Rapid Test for Hydrophytic Vegetation
6. Tolmeia menziesii (piggyback plant)	5	N	FAC	2 - Dominance Test is >50%
7.				☐ 3 - Prevalence Index is ≤3.0 ¹
8.				4 - Morphological Adaptations ¹ (Provide supporting
9.				data in Remarks or on a separate sheet)
10		·		5 - Wetland Non-Vascular Plants ¹
11		·		Problematic Hydrophytic Vegetation ¹ (Explain)
	95	– Total C	over	¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: <u>3 m</u>)	00		0001	be present, unless disturbed or problematic.
1				
2.				Hydrophytic Vegetation
		= Total C	over	Present? Yes 🛛 No 🗌
% Bare Ground in Herb Stratum 5				
Remarks:				

Sampling Point: SP13

<u>nches)</u> C			Rea	ox Features			
	Color (moist)	<u>%</u>	Color (moist)		Type ¹	Loc ²	Texture Remarks
<u>10 1</u>	10YR 2/1						<u>S.L</u>
)-14+ 1	10YR 4/4						GR.S.L
		<u> </u>					
		. <u> </u>					
		·					
ype: C=Con	centration, D=Dep	letion, RM=	=Reduced Matrix, C	S=Covered	or Coate	ed Sand G	arains. ² Location: PL=Pore Lining, M=Matrix.
ydric Soil In	dicators: (Applic	able to all	LRRS, unless othe	erwise noted	d.)		Indicators for Problematic Hydric Soils
Histosol (A	(1)		Sandy Redox ((S5)			2 cm Muck (A10)
Histic Epip	edon (A2)		Stripped Matrix	(S6)			Red Parent Material (TF2)
Black Histi	c (A3)		Loamy Mucky	Mineral (F1)	(except	MLRA 1)	Very Shallow Dark Surface (TF12)
] Hydrogen 3	Sulfide (A4)		Loamy Gleyed	Matrix (F2)			Other (Explain in Remarks)
Depleted E	Below Dark Surface) (A11)	Depleted Matri	x (F3)			
] Thick Dark	Surface (A12)		Redox Dark Su	urface (F6)			³ Indicators of hydrophytic vegetation and
] Sandy Mud	cky Mineral (S1)		Depleted Dark	Surface (F7))		wetland hydrology must be present,
] Sandy Gle	yed Matrix (S4)		Redox Depres	sions (F8)			unless disturbed or problematic.
estrictive La	yer (if present):						
Type:							
Depth (inch	ies):						Hydric Soil Present? Yes 🗌 No 🖂
emarks: No h	ovdric soil indicator	s observer	1				·
		0 00001100					

Primary Indicators (minimum of one required; check all that apply)					<u>Se</u>	condary Indicators (2 or more required)	
Surface Water (A1) Water-Stained Leaves (B9) (except I			ot MLRA		Water-Stained Leaves (B9) (MLRA 1, 2,		
High Water Table (A2)			1, 2, 4A, and 4B)			4A, and 4B)	
Saturation (A3)			Salt Crust (B11)			Drainage Patterns (B10)	
Water Marks (B1)			Aquatic Invertebrates (B13)			Dry-Season Water Table (C2)	
Sediment Deposits (B2)			Hydrogen Sulfide Odor (C1)			Saturation Visible on Aerial Imagery (C9)	
Drift Deposits (B3) Oxidized Rhizospheres along Living Roc			ng Roots (C3)		Geomorphic Position (D2)		
Algal Mat or Crust (B4) Presence of Reduced Iron (C4)				Shallow Aquitard (D3)			
□ Iron Deposits (B5) □ Recent Iron Reduction in Tilled Soils (C6)		ils (C6)		FAC-Neutral Test (D5)			
Surface Soil Cracks (B6)		RR A)		Raised Ant Mounds (D6) (LRR A)			
□ Inundation Visible on Aerial Imagery (B7) □ Other (Explain in Remarks)				Frost-Heave Hummocks (D7)			
Sparsely Vegetated Concave Surface (B8)							
Field Observations:							
Surface Water Present?	Yes 🗌	No 🖂	Depth (inches):				
Water Table Present?	Yes 🗌	No 🖂	Depth (inches):				
Saturation Present? (includes capillary fringe)	Yes 🗌	No 🖂	Depth (inches):	Wetland Hy	drol	ogy Present? Yes 🗌 No 🛛	
Describe Recorded Data (stre	am gauge,	, monitoi	ring well, aerial photos, previous inspec	tions), if availa	able:		
Remarks: No indicators of hyd	drology						

Project/Site: Cumberland Segale	City/County	: King County	Sampling Date:5/14/21
Applicant/Owner: Segale LLC		State: WA	Sampling Point: SP14
Investigator(s): Will Russack		Section, Township, Range: T.21N R.	07E S.21SW
Landform (hillslope, terrace, etc.): slope	Local relie	f (concave, convex, none): <u>Convex</u>	Slope (%): <u>1-3</u>
Subregion (LRR): NW Forest	Lat: <u>47.2909</u>	Long: <u>-121.9303</u>	Datum: WGS 84
Soil Map Unit Name: Barneston gravelly ashy coarse	sandy loam	NWI classifica	tion: <u>None</u>
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" pres	sent? Yes 🛛 No 🗌
Are Vegetation, Soil, or Hydrology	_ naturally problematic?	(If needed, explain any answers ir	n Remarks.)
SUMMARY OF FINDINGS – Attach site	map showing sampling	g point locations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes 🛛	No 🗌 Is t	he Sampled Area	

Hydric Soil Present? Wetland Hydrology Present?	Yes □ No □ Yes □ No □	Is the Sampled Area within a Wetland?	Yes 🗌 No 🖾
Remarks: SP in NW corner of section 2	1, south of NWI riverine feature		

	Absolute	Dominant	Indicator	Dominance Test worksheet:		
<u>Tree Stratum</u> (Plot size: <u>3 m</u>)	% Cover	Species?	Status	Number of Dominant Species		
1. Populus trichocarpa (black cottonwood)	50	Y	FAC	That Are OBL, FACW, or FAC	: 4	(A)
2				Total Number of Dominant		
3				Species Across All Strata:	4	(B)
4						
	50	= Total C	over	That Are OBL_EACW/ or EAC	· 100	(Δ/B)
Sapling/Shrub Stratum (Plot size: 2 m)				mar Ale Obe, I Aow, of I Ao	. <u>100</u>	(7,10)
1. Acer circinatum (vine maple)	80	Y	FAC	Prevalence Index worksheet	:	
2				Total % Cover of:	Multiply by:	
3.				OBL species	x 1 =	
4.				FACW species	x 2 =	
5				FAC species	x 3 =	
··	80	– Total C	over	FACU species	x 4 =	_
Herb Stratum (Plot size: <u>1 m</u>)	00	= 10101 0	0001		x 5 =	_
1. Carex deweyana (Dewey's sedge)	25	Y	FAC	Column Totals:	(Δ)	(B)
2. Petasites frigidus (sweet colt's foot)	10	Y	FACW		(//)	_ (D)
3.				Prevalence Index = B/A	=	
4.				Hydrophytic Vegetation Indi	cators:	
5.				1 - Rapid Test for Hydroph	ytic Vegetation	
6.				2 - Dominance Test is >50	%	
7.				☐ 3 - Prevalence Index is ≤3.	.0 ¹	
8.				4 - Morphological Adaptati	ons ¹ (Provide sup	porting
9.				data in Remarks or on	a separate sheet)	
10				5 - Wetland Non-Vascular	Plants ¹	
11			·	Problematic Hydrophytic V	egetation ¹ (Explain	in)
····	35	– Total C	over	¹ Indicators of hydric soil and w	etland hydrology	must
Woody Vine Stratum (Plot size: 1 m)	<u> </u>	- 10tai C	00001	be present, unless disturbed o	r problematic.	
1.						
2				Hydrophytic		
		– Total C	over	Present? Yes	No 🗆	
% Bare Ground in Herb Stratum 60		- 101010				
Remarks:				1		

Sampling Point: SP 14

Depth	Matrix		Red	ox Features		_	
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>% Type</u>		Texture	Remarks
)-10	<u>10YR 3/2</u>					GR.S.L	
0-14+	<u>10YR 4/3</u>					<u>Gr.S.L</u>	
		·		<u> </u>			
				<u> </u>			
Туре: С=С	Concentration, D=Dep	letion, RM=	-Reduced Matrix, C	CS=Covered or Co	ated Sand Gr	rains.	² Location: PL=Pore Lining, M=Matrix.
lydric Soil	Indicators: (Applic	able to all	LRRs, unless othe	erwise noted.)		Ind	icators for Problematic Hydric Soils ³ :
Histoso	I (A1)		Sandy Redox ((S5)			2 cm Muck (A10)
Histic E	pipedon (A2)		Stripped Matrix	< (S6)			Red Parent Material (TF2)
Black H	listic (A3)		Loamy Mucky	Mineral (F1) (exce	ept MLRA 1)	Ц	Very Shallow Dark Surface (TF12)
_ Hydroge	en Sulfide (A4)	()	Loamy Gleyed	Matrix (F2)			Other (Explain in Remarks)
	d Below Dark Surface	e (A11)		x (F3)		31	l'antenna d'ha dua da d'a constation a sud
	ark Surrace (A12)		Redox Dark St	JITACE (F6)		Sinc	dicators of hydrophytic vegetation and
_ Sandy n □ Sandy (Cloved Matrix (S4)			Sunace (F7)			unless disturbed or problematic
Restrictive	Laver (if present):						unless disturbed of problematic.
Type:	<i>, , ,</i>						
Depth (ir	nches):					Hydric	Soil Present? Yes 🗌 No 🖂
Remarks: N	lo hydric soil indicator	'S				-	
DROLO	GY						
Netland Hy	ydrology Indicators:						
Primary Ind	licators (minimum of c	one required	d; check all that app	oly)			Secondary Indicators (2 or more required)
Surface	Water (A1)		Water-Sta	ained Leaves (B9)	(except MLR	RA [Water-Stained Leaves (B9) (MLRA 1,
🛛 High Wa	ater Table (A2)		1, 2, 4	IA, and 4B)			4A, and 4B)
Saturati	ion (A3)		Salt Crust	t (B11)		[Drainage Patterns (B10)
Water N	Aarks (B1)		Aquatic Ir	vertebrates (B13)		Γ	Dry-Season Water Table (C2)
	nt Deposits (B2)		Hydrogen	Sulfide Odor (C1))	Ī	Saturation Visible on Aerial Imagery (C
Sedime				Phizophoroa alor	a Living Root	ts (C3)	Ceomorphic Position (D2)
Sedime	posits (B3)			KI IZUSUI eles alor			
Sedime Drift De Algal M	posits (B3) at or Crust (B4)			of Reduced Iron (C4)	ι3 (00) [Γ	Shallow Aguitard (D3)
Sedime Drift De Algal Ma	posits (B3) at or Crust (B4) posits (B5)		Oxidized Presence Recent Irr	of Reduced Iron (C4) Iled Soils (C6)	ы (03) [[) Г	Shallow Aquitard (D3) FAC-Neutral Test (D5)

Surface Soil Cracks (B6)		Stunted or Stressed Plants (D1) (LRR A)		Raised Ant Mo	ounds (D6) (LRR A)	
Inundation Visible on Aerial Imagery (B7)		' (B7)	Other (Explain in Remarks)		Frost-Heave H	łummocks (D7)
Sparsely Vegetated Concave Surface (B8)						
Field Observations:						
Surface Water Present?	Yes 🗌	No 🖂	Depth (inches):			
Water Table Present?	Yes 🛛	No 🗌	Depth (inches): <u>10</u>			
Saturation Present? (includes capillary fringe)	Yes 🛛	No 🗌	Depth (inches): <u>8</u>	Wetland H	ydrology Present?	Yes 🛛 No 🗌
Describe Recorded Data (stre	eam gauge	, monitor	ing well, aerial photos, previous inspec	ctions), if avai	lable:	
Remarks:						

Project/Site: Cumberland Segale	City/County:	King County	Sampling Date:5/14/21			
Applicant/Owner: Segale LLC		State: WA	Sampling Point: SP15			
Investigator(s): Will Hohman	s	Section, Township, Range: <u>T.21N R</u>	.07E S.21SW			
Landform (hillslope, terrace, etc.): slope	Local relief	(concave, convex, none): Convex	Slope (%): <u>5-10</u>			
Subregion (LRR): NW Forest	Lat: <u>47.2909</u>	Long: <u>-121.9303</u>	Datum: WGS 84			
Soil Map Unit Name: Barneston gravelly ashy coarse	sandy loam	NWI classific	ation: None			
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" pre	esent? Yes 🛛 No 🗌			
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any answers	in Remarks.)			
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes	No 🖂 Is th	e Sampled Area				

Hydric Soil Present? Wetland Hydrology Present?	Yes No Yes No	Is the Sampled Area within a Wetland?	Yes 🔲 No 🖂			
Remarks: SP in west central portion of Section 21; no surface hydrology. No soil pit excavated						

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>3 m</u>)	% Cover	Species?	Status	Number of Dominant Species
1. Tsuga heterophyla (western hemlock)	40	<u>Y</u>	FACU	That Are OBL, FACW, or FAC: <u>1</u> (A)
2				Total Number of Dominant
3				Species Across All Strata: 4 (B)
4				
	40	= Total C	over	Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: 2 m)				$\frac{1}{1000}$
1. Mahonia nervosa (dull Oregon grape)	<u>30</u>	Y	FACU	Prevalence Index worksheet:
2. Acer circinatum (vine maple)	15	Y	FAC	Total % Cover of: Multiply by:
3. Ilex aquifolium (English holly)	10	N	FACU	OBL species x 1 =
4				FACW species x 2 =
5.				FAC species x 3 =
	55	= Total C	over	FACU species x 4 =
Herb Stratum (Plot size: <u>1 m</u>)				UPL species x 5 =
1. Polystichum munitum (sword fern)	40	<u>Y</u>	FACU	Column Totals: (A) (B)
2				
3				Prevalence Index = B/A =
4.				Hydrophytic Vegetation Indicators:
5.				1 - Rapid Test for Hydrophytic Vegetation
6.				□ 2 - Dominance Test is >50%
7.				☐ 3 - Prevalence Index is ≤3.0 ¹
8				4 - Morphological Adaptations ¹ (Provide supporting
9				data in Remarks or on a separate sheet)
10				5 - Wetland Non-Vascular Plants ¹
11				Problematic Hydrophytic Vegetation ¹ (Explain)
· · · · · · · · · · · · · · · · · · ·	25	- Total C		¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 1 m)	<u> </u>		Over	be present, unless disturbed or problematic.
1.				
2				Hydrophytic Versetation
		– Total C	over	Present? Yes 🗆 No 🖾
% Bare Ground in Herb Stratum 60		- 10(0) 0	0,01	
Remarks:				

Sampling Point: SP 15

(inches) Color (moist) % Co	$r_{\text{const}} = \frac{1}{2} \frac{1}{$	Texture Remarks
		<u>- Homano</u>
		· · · ·
		ing 21 and ing DL Dave Lining M. Matrix
ype: C=Concentration, D=Depletion, RM=R	educed Matrix, CS=Covered or Coated Sand Gra	Ins. ² Location: PL=Pore Lining, M=Matrix.
	Condu Daday (CE)	
Histosol (A1)	Sandy Redox (SS)	Z CM Muck (A10) Red Parent Material (TE2)
Black Histic (A3)	Loamy Mucky Mineral (F1) (excent MI RA 1)	\square Very Shallow Dark Surface (TF12)
Hvdrogen Sulfide (A4)	Loamy Gleved Matrix (F2)	\square Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Matrix (F3)	
Thick Dark Surface (A12)	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and
] Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic.
• • • • • •		
estrictive Layer (if present):		
estrictive Layer (if present): Type:		
estrictive Layer (if present): Type: Depth (inches):		Hydric Soil Present? Yes 🗌 No 🖂
Type:		Hydric Soil Present? Yes 🗌 No 🖂
Restrictive Layer (if present): Type: Depth (inches): Remarks: no soil pit excavated		Hydric Soil Present? Yes 🗌 No 🛛
Restrictive Layer (if present): Type: Depth (inches): Remarks: no soil pit excavated		Hydric Soil Present? Yes 🗌 No 🖂
estrictive Layer (if present): Type: Depth (inches): emarks: no soil pit excavated		Hydric Soil Present? Yes 🗌 No 🖂
estrictive Layer (if present): Type: Depth (inches): emarks: no soil pit excavated		Hydric Soil Present? Yes 🗌 No 🛛
estrictive Layer (if present): Type: Depth (inches): emarks: no soil pit excavated DROLOGY		Hydric Soil Present? Yes 🗌 No 🛛
estrictive Layer (if present): Type: Depth (inches): emarks: no soil pit excavated DROLOGY /etland Hydrology Indicators:		Hydric Soil Present? Yes ☐ No ⊠
estrictive Layer (if present): Type: Depth (inches): emarks: no soil pit excavated	check all that apply)	Hydric Soil Present? Yes ☐ No ⊠
estrictive Layer (if present): Type: Depth (inches): emarks: no soil pit excavated DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one required; of] Surface Water (A1)	check all that apply) □ Water-Stained Leaves (B9) (except MLR /	Hydric Soil Present? Yes □ No ⊠ Secondary Indicators (2 or more required) A □ Water-Stained Leaves (B9) (MLRA 1,
	check all that apply) ☐ Water-Stained Leaves (B9) (except MLR/ 1, 2, 4A, and 4B)	Hydric Soil Present? Yes ☐ No ⊠ Secondary Indicators (2 or more required) A ☐ Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B)
	check all that apply) ☐ Water-Stained Leaves (B9) (except MLR/ 1, 2, 4A, and 4B) ☐ Salt Crust (B11)	Hydric Soil Present? Yes □ No ⊠
	Check all that apply) ☐ Water-Stained Leaves (B9) (except MLR/ 1, 2, 4A, and 4B) ☐ Salt Crust (B11) ☐ Aquatic Invertebrates (B13)	Hydric Soil Present? Yes □ No ⊠
estrictive Layer (if present): Type: Depth (inches): marks: no soil pit excavated OROLOGY Yetland Hydrology Indicators: rimary Indicators (minimum of one required; of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	check all that apply) Water-Stained Leaves (B9) (except MLR/ 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Hydric Soil Present? Yes □ No ⊠
estrictive Layer (if present): Type: Depth (inches): emarks: no soil pit excavated PROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one required; of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	check all that apply) Water-Stained Leaves (B9) (except MLR/ 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roots	Hydric Soil Present? Yes □ No ⊠
estrictive Layer (if present): Type: Depth (inches): emarks: no soil pit excavated DROLOGY fetland Hydrology Indicators: rimary Indicators (minimum of one required; of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	check all that apply) Water-Stained Leaves (B9) (except MLR/ 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roots Presence of Reduced Iron (C4)	Hydric Soil Present? Yes □ No ⊠
estrictive Layer (if present): Type: Depth (inches): emarks: no soil pit excavated DROLOGY fetland Hydrology Indicators: rimary Indicators (minimum of one required; c] 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)	check all that apply) Water-Stained Leaves (B9) (except MLR/ 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roots Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6)	Hydric Soil Present? Yes □ No ⊠
estrictive Layer (if present): Type: Depth (inches): emarks: no soil pit excavated DROLOGY Tetland Hydrology Indicators: rimary Indicators (minimum of one required; of 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)	check all that apply) Water-Stained Leaves (B9) (except MLR/1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roots Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1) (LRR A)	Hydric Soil Present? Yes No ⊠
estrictive Layer (if present): Type:	check all that apply) Water-Stained Leaves (B9) (except MLR/1,2,4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roots Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)	Hydric Soil Present? Yes No ⊠

Surface Water Present?

(includes capillary fringe)

Remarks: no surface hydrology observed

Water Table Present?

Saturation Present?

Yes 🗌 🛛 No 🖾

Yes 🗌 No 🖾

Yes 🗌 🛛 No 🖂

Depth (inches):

Depth (inches):

Depth (inches):

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

Wetland Hydrology Present? Yes 🗌 No 🖂

Project/Site: Cumberland Segale	City/County:	City/County: King County		
Applicant/Owner: Segale LLC		State: WA	_ Sampling Point: SP16	
Investigator(s): Will Russack		Section, Township, Range: <u>T.21N R</u>	07E S.21SW	
Landform (hillslope, terrace, etc.): slope	Local relief	(concave, convex, none): Convex	Slope (%): <u>5-10</u>	
Subregion (LRR): NW Forest	Lat: <u>47.2909</u>	Long: <u>-121.9303</u>	Datum: WGS 84	
Soil Map Unit Name: Barneston gravelly ashy coarse	sandy loam	NWI classific	ation: None	
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" pre	esent? Yes 🛛 No 🗌	
Are Vegetation, Soil, or Hydrology	_ naturally problematic?	(If needed, explain any answers	in Remarks.)	
SUMMARY OF FINDINGS – Attach site r	map showing sampling	point locations, transects	s, important features, etc.	

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes □ No ⊠ Yes □ No ⊠ Yes □ No ⊠	Is the Sampled Area within a Wetland?	Yes 🗌 No 🛛			
Remarks: SP in NW portion of Section 15						

	Absolute	Dominant	Indicator	Dominance Test worksheet:	
<u>Tree Stratum</u> (Plot size: <u>3 m</u>)	% Cover	Species?	Status	- Number of Dominant Species	
1. <u>Pseudotsuga menziesii (Douglas fir)</u>	<u>50</u>	<u>Y</u>	FACU	That Are OBL, FACW, or FAC: 2 (A)	
2. Alnus rubra (red alder)	30	Y	FAC	Total Number of Dominant	
3				Species Across All Strata: <u>5</u> (B)	
4				Barris (Daminas) Orașina	
	80	= Total C	over	That Are OBL FACW, or FAC: 40 (A/B)	
Sapling/Shrub Stratum (Plot size: 2 m)					
1. Acer circinatum (vine maple)	<u>15</u>	<u>Y</u>	FAC	Prevalence Index worksheet:	
2. Gaultheria shallon (salal)	15	Y	FACU	Total % Cover of:Multiply by:	
3. Rubus spectabilis (Salmonberry)	5	<u>N</u>	FAC	OBL species x 1 =	
4				FACW species x 2 =	
5				FAC species x 3 =	
	35	= Total C	over	FACU species x 4 =	
Herb Stratum (Plot size: <u>1 m</u>)				UPL species x 5 =	
1. Polystichum munitum (sword fern)	10	Y	FACU	Column Totals: (A) (B)	
2. Muesci sp (moss)	<u>30</u>		<u>N.L</u>		
3				Prevalence Index = B/A =	
4				Hydrophytic Vegetation Indicators:	
5				1 - Rapid Test for Hydrophytic Vegetation	
6.				2 - Dominance Test is >50%	
7.				☐ 3 - Prevalence Index is ≤3.0 ¹	
8.				4 - Morphological Adaptations ¹ (Provide supporting	
9				data in Remarks or on a separate sheet)	
10				5 - Wetland Non-Vascular Plants ¹	
11		·		Problematic Hydrophytic Vegetation ¹ (Explain)	
	40	– Total C	over	¹ Indicators of hydric soil and wetland hydrology must	
Woody Vine Stratum (Plot size: <u>1 m</u>)	<u>+0</u>	= 10tal 0	0001	be present, unless disturbed or problematic.	
1					
2.				Hydrophytic Vogetation	
		= Total C	over	Present? Yes 🗌 No 🖂	
% Bare Ground in Herb Stratum 30					
Remarks:					

(inches)	Matrix		Redox	Features		·	
	Color (moist)		Color (moist)	<u>% Type¹</u>	Loc ²	Texture Remarks	
)-6	<u>10YR 2/2</u>					<u>S.L</u>	
6-12+	7.5YR 4/6					Gr.S.L	
	anagetration D_Dan		A-Reduced Matrix, CS				M_Motrix
Hydric Soil	Indicators: (Applic	able to a	II LRRs, unless other	wise noted.)	eu Sanu G	Indicators for Problematic Hyd	dric Soils ³ :
Histosol	(A1)		Sandy Redox (S	5)		2 cm Muck (A10)	
Histic Ep	oipedon (A2)		Stripped Matrix (S6)		Red Parent Material (TF2)	
Black His	stic (A3)		Loamy Mucky Mi	neral (F1) (except	MLRA 1)	Very Shallow Dark Surface (TF12)
Hydroge	n Sulfide (A4)		Loamy Gleyed M	latrix (F2)		Other (Explain in Remarks)	
Depleted	d Below Dark Surface	e (A11)	Depleted Matrix ((F3)			
Thick Da	ark Surface (A12)		Redox Dark Surfa	ace (F6)		³ Indicators of hydrophytic vegeta	ation and
Sandy M	lucky Mineral (S1)		Depleted Dark S	urface (F7)		wetland hydrology must be p	resent,
Sandy G	Bleyed Matrix (S4)		Redox Depression	ons (F8)		unless disturbed or problema	tic.
Restrictive I	Layer (if present):						
Type:			_				
	ches):		_			Hydric Soil Present? Yes 🗌 N	No 🖂

Primary Indicators (minimum of one required; check all that apply)					Secondary Indicators (2 or more required)		
Surface Water (A1)	Surface Water (A1) Water-Stained Leaves (B9) (exce			ept MLRA	Water-Stained Leaves (B9) (MLRA 1, 2,		
High Water Table (A2)		1, 2, 4A, and 4B)		4A, and 4B)			
Saturation (A3)			Salt Crust (B11)		Drainage Patterns (B10)		
Water Marks (B1)			Aquatic Invertebrates (B13)		Dry-Season Water Table (C2)		
Sediment Deposits (B2)			Hydrogen Sulfide Odor (C1)		Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)			Oxidized Rhizospheres along Liv	ing Roots (C3)	Geomorphic Position (D2)		
Algal Mat or Crust (B4)			Presence of Reduced Iron (C4)		Shallow Aquitard (D3)		
Iron Deposits (B5)			Recent Iron Reduction in Tilled S	oils (C6)	FAC-Neutral Test (D5)		
□ Surface Soil Cracks (B6)			Stunted or Stressed Plants (D1) (LRR A)	Raised Ant Mounds (D6) (LRR A)		
Inundation Visible on Aeri	□ Inundation Visible on Aerial Imagery (B7) □ Other (Explain in Remarks)		Other (Explain in Remarks)		Frost-Heave Hummocks (D7)		
Sparsely Vegetated Conc	ave Surfac	ce (B8)					
Field Observations:							
Surface Water Present?	Yes 🗌	No 🛛	Depth (inches):				
Water Table Present?	Yes 🗌	No 🖂	Depth (inches):				
Saturation Present?	Yes 🗌	No 🖂	Depth (inches):	Wetland Hy	drology Present? Yes 🗌 No 🛛		
(includes capillary fringe)							
Describe Recorded Data (stre	am gauge	e, monitoi	ring well, aerial photos, previous inspe	ctions), if availa	able:		
Remarks: no hydrology obser	ved						

Project/Site: Cumberland Segale	City/County	King County	Sampling Date: <u>12/3/19</u>	
Applicant/Owner: <u>Segale</u>		State: WA	Sampling Point: SP17	
Investigator(s): Will Russack, Kolten Kosters	:	Section, Township, Range: <u>T.21N R.(</u>	07E S.21SW	
Landform (hillslope, terrace, etc.): slope	Local relie	f (concave, convex, none): <u>Convex</u>	Slope (%): <u>3-5</u>	
Subregion (LRR): NW Forest	Lat: <u>47.2909</u>	Long: <u>-121.9303</u>	Datum: WGS 84	
Soil Map Unit Name: Barneston gravelly ashy coarse	sandy loam	NWI classification: None		
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" pres	ent? Yes 🛛 No 🗌	
Are Vegetation, Soil, or Hydrology	_ naturally problematic?	(If needed, explain any answers in	Remarks.)	
SUMMARY OF FINDINGS – Attach site	map showing sampling	g point locations, transects,	important features, etc.	
	No 🕅			

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes	Is the Sampled Area within a Wetland?	Yes 🗌 No 🛛
Remarks: Sample plot SE of test pit 21D)		

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>5 m</u>)	% Cover	Species?	Status	Number of Dominant Species
1. Pseudotsuga menziesii (Douglas fir)		<u>Y</u>	FACU	That Are OBL, FACW, or FAC: <u>3</u> (A)
2. Prunus virginiana (choke cherry)		Y	FACU	Total Number of Dominant
3. Alnus rubra (red alder)		<u>Y</u>	FAC	Species Across All Strata: <u>9</u> (B)
4				Demonst of Deminent Creation
		= Total C	over	That Are OBL, FACW, or FAC: 33 (A/B)
Sapling/Shrub Stratum (Plot size: 3 m)				
1. Acer circinatum (vine maple)		<u>Y</u>	FAC	Prevalence Index worksheet:
2. <u>Gaultheria shallon (salal)</u>		Y	FACU	Total % Cover of:Multiply by:
3. Holodiscus discolor (oceanspray)		Y	FACU	OBL species x 1 =
4. Rubus armeniacus (Himalayan blackberry)		Y	FAC	FACW species x 2 =
5				FAC species x 3 =
		= Total C	over	FACU species x 4 =
Herb Stratum (Plot size: <u>3 m</u>)				UPL species x 5 =
1. Pteridium aquilinum (bracken fern)		Y	FACU	Column Totals: (A) (B)
2. Polystichum munitum (sword fern)		<u>Y</u>	FACU	
3				Prevalence Index = B/A =
4				Hydrophytic Vegetation Indicators:
5				1 - Rapid Test for Hydrophytic Vegetation
6.				2 - Dominance Test is >50%
7.				☐ 3 - Prevalence Index is ≤3.0 ¹
8.				4 - Morphological Adaptations ¹ (Provide supporting
9.				data in Remarks or on a separate sheet)
10				5 - Wetland Non-Vascular Plants ¹
11			·	Problematic Hydrophytic Vegetation ¹ (Explain)
···		– Total C	over	¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: <u>3 m</u>)		= 101010	0001	be present, unless disturbed or problematic.
1				
2.				Hydrophytic Vegetation
		= Total C	over	Present? Yes 🗌 No 🖂
% Bare Ground in Herb Stratum <u>0</u>			-	
Remarks:				

Sampling Point: SP17

Depth Matrix		Redo	x Features	\$			
(inches) Color (moist)	<u>%</u> C	color (moist)	%	Type ¹	Loc ²	Texture	Remarks
ype: C=Concentration, D=Dep	oletion, RM=F	Reduced Matrix, CS	S=Covered	or Coate	ed Sand G	rains. ² Lo	ocation: PL=Pore Lining, M=Matrix.
ydric Soil Indicators: (Applie	cable to all L	RRs, unless othe	rwise note	ed.)		Indica	tors for Problematic Hydric Soils ³ :
Histosol (A1)	Ľ] Sandy Redox (S	65)			🗌 2 c	m Muck (A10)
Histic Epipedon (A2)		Stripped Matrix	(S6)			🗌 Re	d Parent Material (TF2)
Black Histic (A3)		Loamy Mucky M	lineral (F1) (except	MLRA 1)	🗌 Ve	ry Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)		Loamy Gleyed N	Matrix (F2)			∐ Otł	ner (Explain in Remarks)
Depleted Below Dark Surfac	e (A11) L	Depleted Matrix	(F3) (F3)			31	terre of boots and the second of terre and
Sondy Mucky Minorol (S1)		Redox Dark Sur Doplotod Dark S	Tace (F6)	7)		°Indica	tors of hydrophytic vegetation and
Sandy Mucky Mineral (ST)		Depieted Dark 3 Podox Doprossi		()		wei	and hydrology must be present,
estrictive Laver (if present):	L					unie	ess disturbed of problematic.
Type:						Ukadala Os	
Type: Depth (inches): Remarks:						Hydric So	il Present? Yes 🗌 No 🗌
Depth (inches):						Hydric So	il Present? Yes 🗌 No 🗌
Depth (inches): Depth (inches): emarks:						Hydric So	il Present? Yes 🗌 No 🗌
Depth (inches): emarks: DROLOGY						Hydric So	il Present? Yes 🗌 No 🗌
Type: Depth (inches): emarks: DROLOGY /etland Hydrology Indicators rimary Indicators (minimum of e		check all that appl	 y)			Hydric So	ondary Indicators (2 or more required
Type: Depth (inches): emarks: DROLOGY fetland Hydrology Indicators rimary Indicators (minimum of a] Surface Water (A1)	one required;	check all that appl	y) ned Leave	es (B9) (e	xcept MLF	Hydric So	il Present? Yes No D ondary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 1,
Type: Depth (inches): emarks: DROLOGY Tetland Hydrology Indicators rimary Indicators (minimum of r] Surface Water (A1)] High Water Table (A2)	: one required;	<u>check all that appl</u> ☐ Water-Stai 1, 2, 44	y) ned Leave A, and 4B)	es (B9) (e	xcept MLF	Hydric So	il Present? Yes No ondary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B)
Type: Depth (inches): emarks: DROLOGY Tetland Hydrology Indicators rimary Indicators (minimum of r] Surface Water (A1)] High Water Table (A2)] Saturation (A3)	: one required;	<u>check all that appl</u> ☐ Water-Stai 1, 2, 4 ☐ Salt Crust	<u>y)</u> ned Leave A, and 4B) (B11)	es (B9) (e	xcept MLF	Hydric So	ondary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10)
Type: Depth (inches): emarks: PROLOGY Vetland Hydrology Indicators rimary Indicators (minimum of r] Surface Water (A1)] High Water Table (A2)] Saturation (A3)] Water Marks (B1)	: one required;	check all that appl ☐ Water-Stai 1, 2, 44 ☐ Salt Crust ☐ Aquatic Inv	y) ned Leave A, and 4B) (B11) vertebrates	es (B9) (e) s (B13)	xcept MLF	Hydric So	ondary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Type: Depth (inches): emarks: PROLOGY /etland Hydrology Indicators rimary Indicators (minimum of e] Surface Water (A1)] High Water Table (A2)] Saturation (A3)] Water Marks (B1)] Sediment Deposits (B2)	one required;	check all that appl Water-Stai 1, 2, 44 Salt Crust Aquatic Inv Hydrogen S	y) ned Leave A, and 4B) (B11) vertebrates Sulfide Od	es (B9) (e s (B13) or (C1)	xcept MLF	Hydric So	ondary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (
Type: Depth (inches): emarks: DROLOGY fetland Hydrology Indicators rimary Indicators (minimum of of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)		<u>check all that appl</u> ☐ Water-Stai 1, 2, 4 A ☐ Salt Crust ☐ Aquatic Inv ☐ Hydrogen 3 ☐ Oxidized R	y) ned Leave A, and 4B) (B11) vertebrates Sulfide Od chizospher	es (B9) (e (B13) or (C1) es along	xcept MLF	Hydric So 	oil Present? Yes No ondary Indicators (2 or more required water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2)
Type: Depth (inches): emarks: DROLOGY Tetland Hydrology Indicators rimary Indicators (minimum of response) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	one required;	check all that appl Water-Stai 1, 2, 44 Salt Crust Aquatic Inv Hydrogen 3 Oxidized R Presence o	y) ned Leave A, and 4B) (B11) /ertebrates Sulfide Od thizospher of Reduced	es (B9) (e s (B13) or (C1) es along d Iron (C4	xcept MLF	Hydric So <u>Sec</u> <u>Sa</u> ts (C3)	il Present? Yes No ondary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3)
Type: Depth (inches): emarks:	: one required;	check all that appl Water-Stai 1, 2, 44 Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iron	y) ned Leave A, and 4B) (B11) vertebrates Sulfide Od chizospher of Reduce n Reductic	es (B9) (e s (B13) or (C1) es along d Iron (C4 on in Tilleo	xcept MLF Living Roo I) d Soils (C6	Hydric So Hydric So Sec RA 0 1 1 1 1 1 1 1 1 1 1 1 1 1	il Present? Yes No ondary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Type: Depth (inches): emarks: PROLOGY Vetland Hydrology Indicators rimary Indicators (minimum of vi] 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)	: one required;	check all that appl Water-Stai 1, 2, 44 Salt Crust Aquatic Inv Hydrogen 3 Oxidized R Presence o Recent Iron Stunted or	y) ned Leave A, and 4B) (B11) vertebrates Sulfide Od thizospher of Reduced n Reductic Stressed	es (B9) (e s (B13) or (C1) es along d Iron (C4 Plants (D	Living Roo) d Soils (C6 1) (LRR A)	Hydric So Sec RA	ondary Indicators (2 or more required water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Type: Depth (inches): emarks: PROLOGY /etland Hydrology Indicators rimary Indicators (minimum of e] 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	: one required; Imagery (B7)	check all that appl Water-Stai 1, 2, 44 Salt Crust Aquatic Inv Hydrogen 3 Oxidized R Presence of Recent Iron Stunted or Other (Exp	y) ned Leave A, and 4B) (B11) vertebrates Sulfide Od thizospher of Reduced n Reductio Stressed lain in Ref	es (B9) (e s (B13) or (C1) es along d Iron (C4 on in Tille Plants (D marks)	Living Roo J d Soils (C6 1) (LRR A)	Hydric So Sec RA 0 ts (C3) 0 1 1 1 1 1 1 1 1 1 1 1 1 1	oil Present? Yes No ondary Indicators (2 or more required ondary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Type: Depth (inches): emarks:	imagery (B7) e Surface (B8	check all that appl Water-Stai 1, 2, 44 Salt Crust Aquatic Inv Hydrogen 3 Oxidized R Presence of Recent Iron Stunted or Other (Exp.)	y) ned Leave A, and 4B (B11) vertebrates Sulfide Od thizospher of Reducer of Reducer n Reductic Stressed lain in Ref	es (B9) (e s (B13) or (C1) es along d Iron (C4 on in Tilled Plants (D marks)	Living Roo (I) d Soils (C6 1) (LRR A)	Hydric So	oil Present? Yes No ondary Indicators (2 or more required water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Type: Depth (inches): emarks:	innagery (B7) e Surface (B8	check all that appl Water-Stai 1, 2, 44 Salt Crust Aquatic Inv Hydrogen 3 Oxidized R Presence 0 Recent Iron Stunted or Other (Exp	y) ned Leave A, and 4B) (B11) vertebrates Sulfide Od thizospher of Reduced n Reductio Stressed lain in Rer	es (B9) (e s (B13) or (C1) es along d Iron (C ² on in Tille Plants (D marks)	xcept MLF Living Roo 4) d Soils (C6 1) (LRR A)	Hydric So 	ondary Indicators (2 or more required ondary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Type: Depth (inches): emarks:	Imagery (B7) e Surface (B8	check all that appl Water-Stai 1, 2, 44 Salt Crust Aquatic Inv Hydrogen 3 Oxidized R Presence c Recent Iron Stunted or Other (Exp Depth (inchest	y) ned Leave A, and 4B) (B11) vertebrates Sulfide Od thizospher of Reduce n Reductio Stressed plain in Rer	es (B9) (e s (B13) or (C1) es along d Iron (C4 on in Tilleo Plants (D marks)	xcept MLF Living Roo 4) d Soils (C6 1) (LRR A)	Hydric So 	oil Present? Yes No ondary Indicators (2 or more required water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Type: Depth (inches): emarks:	: one required; Imagery (B7) e Surface (B8 ∕es □ No [2 ∕es □ No [2	check all that appl Water-Stai 1, 2, 44 Salt Crust Aquatic Inv Hydrogen 3 Oxidized R Presence c Recent Iron Stunted or Other (Exp.) Depth (inchest	y) ned Leave A, and 4B) (B11) vertebrates Sulfide Od thizospher of Reduced n Reduction Stressed alain in Ren s):	es (B9) (e s (B13) or (C1) es along d Iron (C4 on in Tille Plants (D marks)	xcept MLF Living Roo I) d Soils (C6 1) (LRR A)	Hydric So Sec RA	oil Present? Yes No ondary Indicators (2 or more required water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Type: Depth (inches): temarks: DROLOGY /etland Hydrology Indicators rimary Indicators (minimum of r] 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 I] Sparsely Vegetated Concavi ield Observations: urface Water Present? /ater Table Present? aturation Present?	: one required; imagery (B7) e Surface (B8 /es	check all that appl Water-Stai 1, 2, 44 Salt Crust Aquatic Inv Hydrogen 3 Oxidized R Presence c Recent Iron Stunted or Other (Exp Depth (inches Depth (inches Depth (inches	y) ned Leave A, and 4B) (B11) vertebrates Sulfide Od thizospher of Reduced n Reductio Stressed alain in Rer s): s): s):	es (B9) (e s (B13) or (C1) es along d Iron (C4 Plants (D marks)	Living Roo Living Roo J d Soils (C6 1) (LRR A) Wetl	Hydric So	oil Present? Yes No ondary Indicators (2 or more required ondary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (1 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) gy Present? Yes No

Project/Site: Cumberland Segale	City/County:	King County	Sampling Date: 12/3/19
Applicant/Owner: <u>Segale</u>		State: WA	_ Sampling Point: <u>SP18</u>
Investigator(s): Will Russack, Kolten Kosters	s	Section, Township, Range: <u>T.21N F</u>	R.07E S.21SW
Landform (hillslope, terrace, etc.): slope	Local relief	(concave, convex, none): Convex	Slope (%): <u>3-5</u>
Subregion (LRR): NW Forest	Lat: <u>47.2909</u>	Long: <u>-121.9303</u>	Datum: WGS 84
Soil Map Unit Name: Barneston gravelly ashy coarse	e sandy loam	NWI classific	cation: <u>None</u>
Are climatic / hydrologic conditions on the site typica	I for this time of year? Yes 🛛	No 🗌 (If no, explain in Remarks	.)
Are Vegetation, Soil, or Hydrology	significantly disturbed?	Are "Normal Circumstances" pr	esent? 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	s, important features, etc.
Hydrophytic Vegetation Present? Yes	No 🕅		

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes ∐ Yes □ Yes □	No 🖂 No 🗔 No 🔲	Is the Sampled Area within a Wetland?	Yes 🗌 No 🖂
Remarks: Sample plot E of test pit 17C				

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>5 m</u>)	% Cover	Species?	Status	Number of Dominant Species
1. Pseudotsuga menziesii (Douglas fir)		Y	FACU	That Are OBL, FACW, or FAC: <u>3</u> (A)
2. Thuja plicata (western red cedar)		Y	FAC	Total Number of Dominant
3				Species Across All Strata: <u>6</u> (B)
4				
		= Total C	over	That Are OBL FACW or FAC: 50 (A/B)
Sapling/Shrub Stratum (Plot size: 3 m)				(12)
1. Acer circinatum (vine maple)		Y	FAC	Prevalence Index worksheet:
2. Gaultheria shallon (salal)		Y	FACU	Total % Cover of: Multiply by:
3. Rubus armeniacus (Himalayan blackberry)		Y	FAC	OBL species x 1 =
4				FACW species x 2 =
5.				FAC species x 3 =
		= Total C	over	FACU species x 4 =
Herb Stratum (Plot size: 3 m)				UPL species x 5 =
1. Polystichum munitum (sword fern)		Y	FACU	Column Totals: (A) (B)
2				
3				Prevalence Index = B/A =
4				Hydrophytic Vegetation Indicators:
5				1 - Rapid Test for Hydrophytic Vegetation
6.				□ 2 - Dominance Test is >50%
7.				☐ 3 - Prevalence Index is ≤3.0 ¹
8.				4 - Morphological Adaptations ¹ (Provide supporting
9.				data in Remarks or on a separate sheet)
10.				5 - Wetland Non-Vascular Plants ¹
11				Problematic Hydrophytic Vegetation ¹ (Explain)
		– Total C	over	¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 3 m)		= 10(a) 0	0001	be present, unless disturbed or problematic.
1.				
2.				Hydrophytic
		= Total C	over	Present? Yes \Box No \boxtimes
% Bare Ground in Herb Stratum <u>0</u>				
Remarks:				•

Sampling Point: SP18

(inches)	Color (moist)	%		or (moist)	%	Type ¹	Loc ²	Texture	Remarks
<u> </u>									
vpe C-C	oncentration D=D	enletion	RM-Rec	duced Matrix	CS-Covered	l or Coate	ed Sand Gr	ains	² l ocation: PI –Pore Lining M–Matrix
ype: 0=0 ydric Soil	Indicators: (App	licable to	all LRF	Rs, unless of	herwise not	∋d.)		Indic	cators for Problematic Hydric Soils ³ :
] Histosol	(A1)			Sandy Redo	x (S5)			□ 2	2 cm Muck (A10)
] Histic Ep	pipedon (A2)			Stripped Mat	rix (S6)			🗌 F	Red Parent Material (TF2)
Black Hi	stic (A3)			Loamy Muck	y Mineral (F1) (except	: MLRA 1)		/ery Shallow Dark Surface (TF12)
] Hydroge	n Sulfide (A4)	(Loamy Gleye	ed Matrix (F2)				Other (Explain in Remarks)
J Depleted	Below Dark Sufface (A12)	ace (A11)		Depleted Ma	trix (F3) Surface (F6)			³ Indi	cators of hydrophytic vegetation and
Sandv M	lucky Mineral (S1)			Depleted Dark	rk Surface (F	7)		w	vetland hydrology must be present.
] Sandy G	leyed Matrix (S4)			Redox Depre	essions (F8)	,		u	nless disturbed or problematic.
estrictive	Layer (if present)	:							
Туре:									
Depth (in	ches):							Hydric S	Soil Present? Yes 🗌 No 🗌
Remarks:									
DROLOG	θY								
etland Hy	drology Indicator	's:							
rimary Indi	<u>cators (minimum o</u>	f one req	uired; ch	eck all that a	pply)			Se	econdary Indicators (2 or more required)
Surface	Water (A1)			□ Water-S	Stained Leave	es (B9) (e	xcept MLR	A 🗆] Water-Stained Leaves (B9) (MLRA 1,
] High Wa	iter Table (A2)			1, 2	, 4A, and 4B))			4A, and 4B)
Saturatio	on (A3)			🔲 Salt Cru	ıst (B11)] Drainage Patterns (B10)
Water M	arks (B1)			Aquatic	Invertebrates	s (B13)] Dry-Season Water Table (C2)
Sedimer	nt Deposits (B2)			Hydroge	en Sulfide Od	or (C1)] Saturation Visible on Aerial Imagery (C
Drift Dep	oosits (B3)			Oxidize	d Rhizospher	es along	Living Root	is (C3)	Geomorphic Position (D2)
Algal Ma	at or Crust (B4)			Presence	ce of Reduce	d Iron (C4	4)] Shallow Aquitard (D3)
Iron Dep	osits (B5)			Recent	Iron Reduction	on in Tilleo	d Soils (C6)] FAC-Neutral Test (D5)
Surface	Soil Cracks (B6)			Stunted	or Stressed	Plants (D	1) (LRR A)		Raised Ant Mounds (D6) (LRR A)
Inundatio	on Visible on Aeria	I Imagery	(B7)	Other (E	Explain in Rer	narks)			Frost-Heave Hummocks (D7)
Sparsely	Vegetated Conca	ive Surfac	e (B8)						
ield Obser	vations:								
Surface Wat	er Present?	Yes 🗌	No 🖂	Depth (inc	hes):				
Surface Wat Water Table	er Present? Present?	Yes 🗌 Yes 🗌	No 🖂 No 🗌	Depth (inc Depth (inc	hes): hes):				

Remarks: no surface water observed

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

(includes capillary fringe)

Project/Site: Cumberland Segale	City/County:	King County	Sampling Date: <u>12/3/19</u>
Applicant/Owner: Segale		State: WA	Sampling Point: <u>SP19</u>
Investigator(s): Will Russack, Kolten Kosters	S	ection, Township, Range: T.21N	R.07E S.21SW
Landform (hillslope, terrace, etc.): terrace	Local relief	(concave, convex, none): <u>Convex</u>	<u> </u>
Subregion (LRR): <u>NW Forest</u>	Lat: <u>47.2909</u>	Long: <u>-121.9303</u>	Datum: WGS 84
Soil Map Unit Name: Barneston gravelly ashy coars	se sandy loam	NWI classifi	cation: None
Are climatic / hydrologic conditions on the site typica	al for this time of year? Yes 🛛	No 🗌 (If no, explain in Remarks	s.)
Are Vegetation, Soil, or Hydrology	significantly disturbed?	Are "Normal Circumstances" p	resent? Yes 🛛 No 🗌
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any answers	s in Remarks.)
SUMMARY OF FINDINGS – Attach site	a map showing sampling	point locations, transect	s, important features, etc.
Hydrophytic Vegetation Present? Yes] No 🛛	a Sampled Area	

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes □ No ⊠ Yes □ No ⊠ Yes □ No □	Is the Sampled Area within a Wetland?	Yes 🗌 No 🛛	
Remarks: Sample plot SW of test pit	17B			

	Absolute	Dominant	Indicator	Dominance Test worksheet:		
<u>Tree Stratum</u> (Plot size: <u>5 m</u>)	% Cover	Species?	Status	Number of Dominant Species		
1. <u>Pseudotsuga menziesii (Douglas fir)</u>		<u>Y</u>	FACU	That Are OBL, FACW, or FAC	: <u>0</u>	(A)
2				Total Number of Dominant		
3				Species Across All Strata:	4	(B)
4				Demonst of Deminent Creation		
		= Total C	over	That Are OBL FACW or FAC	: 0	(A/B)
Sapling/Shrub Stratum (Plot size: 3 m)					. <u>.</u>	()
1. Mahonia nervosa (dull Oregon grape)		Y	FACU	Prevalence Index worksheet	:	
2. Gaultheria shallon (salal)		<u>Y</u>	FACU	Total % Cover of:	Multiply by:	
3				OBL species	x 1 =	_
4				FACW species	x 2 =	_
5.				FAC species	x 3 =	
		= Total C	over	FACU species	x 4 =	
Herb Stratum (Plot size: 3 m)					x 5 =	
1. Polystichum munitum (sword fern)		Y	FACU	Column Totals:	(A)	(B)
2						_ (-/
3.				Prevalence Index = B/A	=	
4.				Hydrophytic Vegetation Indi	cators:	
5.				1 - Rapid Test for Hydroph	ytic Vegetation	
6.				2 - Dominance Test is >50	%	
7.				☐ 3 - Prevalence Index is ≤3.	.0 ¹	
8				4 - Morphological Adaptati	ons ¹ (Provide sup	porting
9.				data in Remarks or on	a separate sheet)	
10.				5 - Wetland Non-Vascular	Plants ¹	
11				Problematic Hydrophytic V	egetation ¹ (Explain	in)
· · · ·		- Total C	over	¹ Indicators of hydric soil and w	etland hydrology	must
Woody Vine Stratum (Plot size: 3 m)		= 101010	0101	be present, unless disturbed o	r problematic.	
1.						
2.				Hydrophytic		
		= Total C	over	Present? Yes	No 🖂	
% Bare Ground in Herb Stratum <u>0</u>						
Remarks:				•		

Sampling Point: SP19

(inches)	Color (moist)	%	Color (moist)	% Type ¹	Loc ²	Texture	Remarks
	10YR 2/2					S.L	
	10YR 4/4					<u>SI</u>	
	1011(4/4					<u>0.</u>	
					. <u> </u>		
Type: C=C	concentration, D=De	epletion, RM	I=Reduced Matrix	, CS=Covered or Coat	ed Sand Gi	rains. ² Lo	ocation: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Appl	icable to al	l LRRs, unless c	otherwise noted.)		Indica	tors for Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy Red	ox (S5)		🗌 2 c	m Muck (A10)
Histic Ep	pipedon (A2)		Stripped Ma	atrix (S6)		🗌 Re	d Parent Material (TF2)
Black Hi	istic (A3)		Loamy Muc	ky Mineral (F1) (excep	MLRA 1)		ry Shallow Dark Surface (TF12)
_ Hydroge	en Sulfide (A4) d Bolow Dark Surfa	000 (111)	Loamy Gley Depleted M	ed Matrix (F2)			ier (Explain in Remarks)
	u Below Dark Sulla ark Surface (A12)	ice (ATT)		Surface (F6)		³ Indica	tors of hydrophytic vegetation and
Sandy M	Aucky Mineral (S1)			ark Surface (F7)		wet	and hydrology must be present.
Sandy G	Gleyed Matrix (S4)		Redox Depi	ressions (F8)		unle	ess disturbed or problematic.
Restrictive	Layer (if present):						•
Type							
Type			-				
Depth (in	nches):		-			Hydric So	il Present? Yes 🗌 No 🛛
Depth (in Remarks:	nches):		-			Hydric So	il Present? Yes 🗌 No 🛛
Depth (in Remarks:	iches):		-			Hydric So	il Present? Yes 🗌 No 🛛
Depth (in Remarks:	nches):		-			Hydric So	il Present? Yes 🗌 No 🛛
Depth (in Remarks:	nches):		-			Hydric So	il Present? Yes 🗌 No 🛛
Depth (in Remarks:	iches):		-			Hydric So	il Present? Yes 🗌 No ⊠
Depth (in Remarks: DROLOC	iches): GY rdrology Indicator:	s:	-			Hydric So	il Present? Yes ☐ No ⊠
Depth (in Remarks: DROLOC Vetland Hy Primary Indi	SY cators (minimum of	s: f one require	- - ed; check all that	apply)		Hydric So	il Present? Yes D No X
Depth (in Remarks: DROLOC Vetland Hy Primary Indi	GY Cators (minimum of Water (A1)	s: f one require	- - - - - - - - - - - - - - - - - - -	apply) Stained Leaves (B9) (e	xcept MLF	Hydric So	Il Present? Yes ☐ No ⊠ Ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1,
Depth (in Remarks: DROLOC Vetland Hy Primary Indi Surface High Wa	GY drology Indicators cators (minimum of Water (A1) ater Table (A2)	s: f one require	ed; check all that □ Water- 1, 2	apply) Stained Leaves (B9) (e 2, 4A, and 4B)	xcept MLF	Hydric So	il Present? Yes ☐ No ⊠ ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B)
Depth (in Remarks: DROLOC Vetland Hy Primary Indi Surface High Wa Saturatio	GY drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3)	s: f one require	ed; check all that □ Water- 1, 2 □ Salt Ci	apply) Stained Leaves (B9) (e 2 , 4A, and 4B) 'ust (B11)	xcept MLF	Hydric So	il Present? Yes ☐ No ⊠ ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10)
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Remarks: no surface water observed

Project/Site: Cumberland Segale	City/Coun	ty: King County	Sampling Date: 12/3/19
Applicant/Owner: Segale		State: WA	_ Sampling Point: <u>SP20</u>
Investigator(s): Will Russack, Kolten Kosters		Section, Township, Range: T.21N F	R.07E S.21SW
Landform (hillslope, terrace, etc.): terrace	Local rel	ief (concave, convex, none): <u>Convex</u>	Slope (%): <u>1-2</u>
Subregion (LRR): <u>NW Forest</u>	Lat: <u>47.2909</u>	Long: <u>-121.9303</u>	Datum: WGS 84
Soil Map Unit Name: Barneston gravelly ashy coarse sa	ndy loam	NWI classifi	cation: <u>None</u>
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" pr	esent? Yes 🛛 No 🗌
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any answers	in Remarks.)
SUMMARY OF FINDINGS – Attach site ma	ap showing sampli	ng point locations, transect	s, important features, etc.
Hydrophytic Vegetation Present? Yes 🗌 No		the Sampled Area	

Hydric Soil Present? Wetland Hydrology Present?	Yes No Yes No Yes No	Is the Sampled Area within a Wetland?	Yes 🔲 No 🖂
Remarks: Sample plot in forest adjac	ent to test pit 17A		

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>5 m</u>)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1. <u>Pseudotsuga menziesii (Douglas fir)</u>		<u>Y</u>	FACU	That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>4</u> (B)
4				
		= Total C	over	Percent of Dominant Species That Are OBL_EACW_or_EAC: 0 (A/B)
Sapling/Shrub Stratum (Plot size: 3 m)				
1. Rubus spectabilis (salmonberry)		Y	FAC	Prevalence Index worksheet:
2. Gaultheria shallon (salal)		Y	FACU	Total % Cover of: Multiply by:
3. Rubus armeniacus (Himalayan blackberry)		Y	FAC	OBL species x 1 =
4				FACW species x 2 =
5.				FAC species x 3 =
		= Total C	over	FACU species x 4 =
Herb Stratum (Plot size: <u>3 m</u>)				UPL species x 5 =
1. Polystichum munitum (sword fern)		Υ	FACU	Column Totals: (A) (B)
2		·		
3				Prevalence Index = B/A =
4				Hydrophytic Vegetation Indicators:
5.				1 - Rapid Test for Hydrophytic Vegetation
6.				□ 2 - Dominance Test is >50%
7.				☐ 3 - Prevalence Index is ≤3.0 ¹
8.		·		4 - Morphological Adaptations ¹ (Provide supporting
9				data in Remarks or on a separate sheet)
10		·		5 - Wetland Non-Vascular Plants ¹
11		·		Problematic Hydrophytic Vegetation ¹ (Explain)
····		- Total C		¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 3 m)			over	be present, unless disturbed or problematic.
1.				
2				Hydrophytic Versetation
		– Total C	over	Present? Yes \Box No \boxtimes
% Bare Ground in Herb Stratum <u>0</u>		- 101010	0,01	
Remarks:				

Sampling Point: SP20

Deptn Matr	Х	Re	dox Featur	es		_		
(inches) Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks
							_	
Type: C=Concentration, D=	Depletion, I	RM=Reduced Matrix,	CS=Covere	ed or Coate	ed Sand G	rains. ² Lo	ocation: PL=I	Pore Lining, M=Matrix.
lydric Soil Indicators: (Ap	plicable to	all LRRs, unless ot	nerwise no	ted.)		Indicat	tors for Prob	lematic Hydric Soils ³ :
Histosol (A1)		Sandy Redox	(S5)			🗌 2 c	m Muck (A10))
Histic Epipedon (A2)		Stripped Matr	ix (S6)			🗌 Re	d Parent Mate	erial (TF2)
Black Histic (A3)		Loamy Mucky	/ Mineral (F	1) (except	MLRA 1)	🗌 Vei	ry Shallow Da	ark Surface (TF12)
Hydrogen Sulfide (A4)		Loamy Gleye	d Matrix (F2	2)		🗌 Oth	ner (Explain ir	n Remarks)
Depleted Below Dark Sur	face (A11)	Depleted Mat	rix (F3)			2		
Thick Dark Surface (A12) Sendy Musley Minorel (S1	`		Surface (F6)		Indica	tors of hydrop	onytic vegetation and
Sandy Mucky Mineral (S1)		K Sufface (I	-7)		weti	iana nyarolog	ly must be present,
Sanuy Gleyeu Matrix (34)) +)-		5510115 (FO)			Unie		or problematic.
	.y.							
Turner								
Type:								
Type: Depth (inches): Remarks:						Hydric So	il Present?	Yes 🗌 No 🛛
Type: Depth (inches): Remarks:						Hydric So	il Present?	Yes 🗌 No 🛛
Type: Depth (inches): Remarks:						Hydric So	il Present?	Yes 🗌 No 🛛
Type: Depth (inches): Remarks: DROLOGY Vetland Hydrology Indicato	ors:					Hydric So	il Present?	Yes 🗌 No 🛛
Type: Depth (inches): Remarks: DROLOGY Vetland Hydrology Indicato Primary Indicators (minimum	ors: of one requ	uired; check all that ap				Hydric So	ondary Indica	Yes 🗌 No 🖂
Type: Depth (inches): Remarks: DROLOGY Vetland Hydrology Indicator Primary Indicators (minimum] Surface Water (A1)	ors: of one requ	 	oply) tained Leav	ves (B9) (e	xcept MLF	Hydric So	ondary Indica	Yes No 🖂
Type: Depth (inches): Remarks: DROLOGY Vetland Hydrology Indicator Primary Indicators (minimum] Surface Water (A1)] High Water Table (A2)	ors: of one requ	uired; check all that ap	oply) tained Leav 4A, and 4	ves (B9) (e 3)	xcept MLF	Hydric So	il Present? ondary Indica Water-Stained 4A, and 4	Yes No X ttors (2 or more required) d Leaves (B9) (MLRA 1, B)
Type: Depth (inches): Remarks: DROLOGY Vetland Hydrology Indicator Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3)	ors: of one requ	uired; check all that an □ Water-S 1, 2, □ Salt Cru:	oply) tained Leav 4A, and 4B st (B11)	ves (B9) (e 3)	xcept MLF	Hydric So	ondary Indica Water-Stained 4A, and 4 Drainage Patt	Yes No X No X ttors (2 or more required) d Leaves (B9) (MLRA 1, B) terns (B10)
Type: Depth (inches): Remarks: DROLOGY Vetland Hydrology Indicato Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	ors: of one requ	uired; check all that ag □ Water-S 1, 2, □ Salt Cru: □ Aquatic	oply) tained Leav 4A, and 4 st (B11) Invertebrate	ves (B9) (e 3) es (B13)	xcept MLF	Hydric So	ondary Indica Water-Stained 4A, and 4 Drainage Patt Dry-Season V	Yes No X No
Type: Depth (inches): Remarks: DROLOGY Vetland Hydrology Indicato Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	ors: of one requ	iired; check all that ap Water-S 1, 2, Salt Cru: Aquatic Hydroge	oply) tained Leav 4A, and 4B st (B11) Invertebrate n Sulfide C	ves (B9) (e 3) es (B13) dor (C1)	xcept MLF	Hydric So	ondary Indica Water-Stained 4A, and 4 Drainage Patt Dry-Season V Saturation Vis	Yes No X ttors (2 or more required) d Leaves (B9) (MLRA 1, B) terns (B10) Vater Table (C2) sible on Aerial Imagery (
Type: Depth (inches): temarks: DROLOGY Vetland Hydrology Indicator trimary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	ors: of one requ	uired; check all that an Water-S 1, 2, Salt Crue Aquatic Hydroge	oply) tained Leav 4A, and 4E st (B11) Invertebrate n Sulfide C I Rhizosphe	ves (B9) (e 3) es (B13) edor (C1) eres along	xcept MLF	Hydric So <u>Secc</u> RA 1 1 	ondary Indica ondary Indica Water-Stained 4A, and 4 Drainage Patt Dry-Season V Saturation Vis Geomorphic F	Yes No X ttors (2 or more required) d Leaves (B9) (MLRA 1, B) terns (B10) Vater Table (C2) sible on Aerial Imagery (C Position (D2)
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Project/Site: Cumberland Segale	City/Cour	nty: King County	Sampling Date:5/14/21
Applicant/Owner: Segale		State: WA	Sampling Point: SP21
Investigator(s): Will Russack, Kolten Kosters		_ Section, Township, Range: <u>T.21N R.(</u>	07E S.21SW
Landform (hillslope, terrace, etc.): slope	Local re	lief (concave, convex, none): <u>Convex</u>	Slope (%): <u>1-2</u>
Subregion (LRR): NW Forest	Lat: <u>47.2909</u>	Long: <u>-121.9303</u>	Datum: WGS 84
Soil Map Unit Name: Barneston gravelly ashy coarse	e sandy loam	NWI classifica	tion: <u>None</u>
Are climatic / hydrologic conditions on the site typica	I for this time of year? Yes	🛛 No 🗌 (If no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology	significantly disturbed?	Are "Normal Circumstances" pres	ent? Yes 🛛 No 🗌
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS – Attach site	map showing sampli	ng point locations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes	No 🖂	s the Sampled Area	

Hydric Soil Present? Wetland Hydrology Present?	Yes No Yes No Yes No	Is the Sampled Area within a Wetland?	Yes 🗌 No 🛛	
Remarks: Sample plot in west central	portion of Section 21			

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>5 m</u>)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1. Tsuga heterophylla (western hemlock)	<u>60</u>	<u>Y</u>	FACU	That Are OBL, FACW, or FAC: <u>1</u> (A)
2				Total Number of Dominant
3				Species Across All Strata: 5 (B)
4.				
	60	= Total C	over	Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: 3 m)				$\frac{1}{20}$
1. Acer circinatum (vine maple)	30	Y	FAC	Prevalence Index worksheet:
2. Vaccinum parvifolium (evergreen huckleberry)	10	Y	FACU	Total % Cover of: Multiply by:
3. Gaultheria shallon (salal)	10	Y	FACU	OBL species x 1 =
4.				FACW species x 2 =
5.				FAC species x 3 =
	50	= Total C	over	FACU species x 4 =
Herb Stratum (Plot size: <u>1 m</u>)				UPL species x 5 =
1. Polystichum munitum (sword fern)	30	Y	FACU	Column Totals: (A) (B)
2				
3				Prevalence Index = B/A =
4.				Hydrophytic Vegetation Indicators:
5.				1 - Rapid Test for Hydrophytic Vegetation
6.				□ 2 - Dominance Test is >50%
7.		·		☐ 3 - Prevalence Index is ≤3.0 ¹
8		·		4 - Morphological Adaptations ¹ (Provide supporting
9	·	·		data in Remarks or on a separate sheet)
10				5 - Wetland Non-Vascular Plants ¹
11	·			Problematic Hydrophytic Vegetation ¹ (Explain)
· · · · · · · · · · · · · · · · · · ·	20	- Total C		¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 1 m)	<u> </u>		over	be present, unless disturbed or problematic.
<u> </u>				
2				Hydrophytic Versetation
		= Total C	over	Present? Yes I No 🛛
% Bare Ground in Herb Stratum 50		_ 10(a) C		
Remarks:				

Sampling Point: SP21

(inches) Color (moist)		Redux	Features	6			
	% Color (I	noist)	%	Type ¹	Loc ²	Texture	Remarks
		· _					
		· _					
· · · ·							
Type: C=Concentration, D=Deplet	ion, RM=Reduce	ed Matrix, CS=	-Covered	l or Coate	ed Sand G	rains.	² Location: PL=Pore Lining, M=Matrix.
lydric Soil Indicators: (Applicab	le to all LRRs,	unless otherw	vise note	ed.)		Ind	licators for Problematic Hydric Soils ³ :
☐ Histosol (A1)	🗌 Sar	ndy Redox (S5	5)				2 cm Muck (A10)
Histic Epipedon (A2)	🗌 Stri	pped Matrix (S	6)				Red Parent Material (TF2)
Black Histic (A3)	🗌 Loa	my Mucky Mir	neral (F1)) (except	MLRA 1)		Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	Loa	my Gleyed Ma	atrix (F2)				Other (Explain in Remarks)
Depleted Below Dark Surface (A	A11) 🗌 Dep	pleted Matrix (I	F3)			2.	
Ihick Dark Surface (A12) Search: Muslay Mineral (C1)		lox Dark Surfa	ace (F6)	7)		°Inc	dicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)		Neted Dark Su	Inace (F7	()			unloss disturbed or problematic
_ Sandy Gleyed Matrix (S4)		JOX Depressio	IIS (FO)				unless disturbed of problematic.
Type:							
Denth (incluse)							
Depth (Inches):						Hydric	Soll Present? Yes No
DROLOGY							
DROLOGY Vetland Hydrology Indicators:							
DROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one	required; check	all that apply)				§	Secondary Indicators (2 or more required)
DROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1)	e required; check	all that apply) Water-Staine	ed Leave	s (B9) (e	xcept MLF	<u>S</u>	Secondary Indicators (2 or more required)
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DROLOGY Vetland Hydrology Indicators: ?rimary Indicators (minimum of one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	e required; check	all that apply) Water-Staine 1, 2, 4A, Salt Crust (E Aquatic Inve Hydrogen St	ed Leave and 4B) 311) rtebrates ulfide Od	s (B9) (e - (B13) or (C1)	xcept MLF	RA [[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 (C8
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DROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	e required; check	all that apply) Water-Staine 1, 2, 4A, Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Presence of	ed Leave and 4B) 311) rtebrates ulfide Od izosphere Reduced	s (B9) (e (B13) or (C1) es along d Iron (C4	xcept MLF	RA [I I ots (C3) [Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C3) Geomorphic Position (D2) Shallow Aquitard (D3)
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DROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one 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 Ima	e required; check	all that apply) Water-Staine 1, 2, 4A , Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Presence of Recent Iron Stunted or S Other (Expla	ed Leave and 4B) 311) rtebrates ulfide Od izosphere Reduceo Reduceo tressed f in in Rer	s (B9) (e (B13) or (C1) es along d Iron (C4 n in Tiller Plants (D narks)	Living Roo) d Soils (C6 1) (LRR A)	RA [[ots (C3) [;) []	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C3 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
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DROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one 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 Ima Sparsely Vegetated Concave Surfield Observations:	e required; check	all that apply) Water-Staine 1, 2, 4A, Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Presence of Recent Iron Stunted or S Other (Expla	ed Leave and 4B) 311) rtebrates ulfide Od izosphere Reduceo Reductio tressed F in in Rer	s (B9) (e ; (B13) or (C1) es along d Iron (C4 n in Tille Plants (D narks)	xcept MLF	RA [[ots (C3) []) [Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C3 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
DROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one 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 Ima Sparsely Vegetated Concave So "ield Observations: Surface Water Present?	e required; check	all that apply) Water-Staine 1, 2, 4A, Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Presence of Recent Iron Stunted or S Other (Expla	ed Leave and 4B) 311) rtebrates ulfide Od izosphere Reduceo Reductio tressed f in in Rer	s (B9) (e s (B13) or (C1) es along d Iron (C4 n in Tille Plants (D narks)	Living Roo) d Soils (C6 1) (LRR A)	RA [Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C3 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
DROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one 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 Ima Sparsely Vegetated Concave Si Field Observations: Surface Water Present? Yes	e required; check	all that apply) Water-Staine 1, 2, 4A, Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Presence of Recent Iron Stunted or S Other (Expla Depth (inches):	ed Leave and 4B) 311) rtebrates Jlfide Od izosphere Reduceo Reductio tressed F in in Rer	s (B9) (e s (B13) or (C1) es along d Iron (C4 n in Tille Plants (D narks)	Living Roo) d Soils (C6 1) (LRR A)	RA [[[[[]]]] [Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C3 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
DROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one 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 Ima Sparsely Vegetated Concave Stried Observations: Surface Water Present? Yes Vater Table Present? Yes Saturation Present? Yes Saturation Present? Yes	e required; check	all that apply) Water-Staine 1, 2, 4A , Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain Depth (inches): Depth (inches):	ed Leave and 4B) 311) rtebrates ulfide Od izosphere Reduceto tressed F in in Rer	s (B9) (e s (B13) or (C1) es along d Iron (C4 n in Tille Plants (D narks)	Living Roo) d Soils (C6 1) (LRR A) Wetl	RA [[ots (C3) [5) [) [and Hydr	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 (CS Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)