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AOA

Environmental
Planning &
Landscape
Architecture



October 13, 2025

AOA-5438

Steve Hall
Steve@rp-partners.com

**SUBJECT: Updated Critical Areas Designation (CADS23-0269)
Parcel 092606-9003, King County, WA**

Dear Steve:

On May 11, 2017, AOA conducted an initial wetland and stream reconnaissance and delineation on the undeveloped subject property utilizing the methodology outlined in the *May 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)*. On October 3, 2023, AOA conducted a second site review to: 1) confirm that the delineation had not changed and 2) rate the wetlands per the current King County code and rating system. A third review was conducted more recently on August 19, 2025, to extend the CAD evaluation area to the previously excluded western portion of the parcel. The primary purpose of the review was to delineate and rate Wetland C in the northwest corner of the parcel.

Four wetlands (Wetlands A, B, C, and D) and two streams (Streams 1 and 2) were identified and delineated on or immediately adjacent to the site during the field investigations. All critical areas were subsequently surveyed except for Wetland C which is approximated. Based on our recent site review on August 19, 2025, the surveyed delineation that was approved as part of CADS23-0269 has not changed.

Attachment A contains data sheets prepared for representative locations in both the on-site wetlands and uplands. These data sheets document the vegetation, soil, and hydrological information that aided in the wetland boundary delineations.

Wetland A

Wetland A consists of an isolated topographic depression located in the northeastern portion of the site. Soils within the wetland were saturated to the surface at the time of the delineation, with surface staining and other evidence of shallow seasonal ponding observed.

Vegetation within Wetland A consisted of a forested and scrub-shrub plant community that included black cottonwood (*Populus trichocarpa*) salmonberry

(*Rubus spectabilis*), vine maple (*Acer circinatum*), slough sedge (*Carex obnupta*), lady fern (*Athyrium filix-femina*), and sword fern (*Polystichum munitum*).

Wetland A currently meets the criteria for a Category III wetland with 6 Habitat Points (**Attachment B**). Category III wetlands with 6 Habitat Points require a standard 110-foot buffer plus 15-foot building setback from the wetland edge.

Wetland B and Stream 2

Wetland B is located within a topographic swale off-site to the southeast. Hydrologic support to the wetland appears to be from groundwater seepage that drains down into a small southwest flowing channel (Stream 2). Soils within the wetland were saturated to the surface during the delineation.

Vegetation within Wetland B consisted of a forested and scrub-shrub plant community that included western red cedar (*Thuja plicata*), red alder (*Alnus rubra*), salmonberry, vine maple, lady fern, and skunk cabbage (*Lysichiton americanum*).

Wetland B currently meets the criteria for a Category III wetland with 7 Habitat Points (**Attachment B**). Category III wetlands with 7 Habitat Points currently require a standard 110-foot buffer plus 15-foot building setback from the wetland edge. Stream 2 is a Type N Aquatic Area and requires a standard 65-foot buffer plus 15-foot building setback from the Ordinary High Water. This stream buffer is located entirely within the buffer of Wetland B.

Wetland C

Wetland C is an isolated, shallow Depressional Hydrogeomorphic classed wetland located in the northwest corner of the site. Soils were dry during the delineation but contained surface soil cracks with hydric soils present.

Vegetation within Wetland C consisted of a forested and scrub-shrub plant community which included western red cedar, vine maple, salmonberry, lady fern, and skunk cabbage.

Wetland C meets the criteria for a Category II wetland with 7 Habitat Points (**Attachment B**). Category II wetlands with 7 Habitat Points require a standard 110-foot buffer plus 15-foot building setback from the wetland edge.

Wetland D and Stream 1

Stream 1 flows from north to south along the western property line before turning southeast and flowing though Wetland D in the southwest corner of the parcel. Wetland D consists of a Riverine Hydrogeomorphic class wetland associated with the stream. Runoff within the stream continues to flow south to the east of the residence located on the adjacent property to the south.

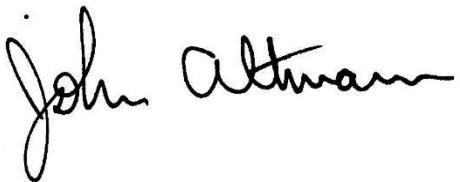
Vegetation within Wetland D consisted of a forested and scrub-shrub plant community that included black cottonwood, salmonberry, vine maple, lady fern, and skunk cabbage.

Wetland D currently meets the criteria for a Category II wetland with 7 Habitat Points (**Attachment B**). Category II wetlands with 7 Habitat Points require a standard 110-foot buffer plus 15-foot building setback from the wetland edge. Stream 1 was previously approved as a Type N Aquatic Area and requires a standard 65-foot buffer that is located completely within the buffers of Wetland C and D.

If you have any questions regarding the delineation confirmation or updated ratings, please give me a call.

Sincerely,

ALTMANN OLIVER ASSOCIATES, LLC

A handwritten signature in black ink that reads "John Altmann". The signature is fluid and cursive, with "John" on the top line and "Altmann" on the bottom line.

John Altmann
Ecologist

Attachments



Altmann Oliver Associates, LLC

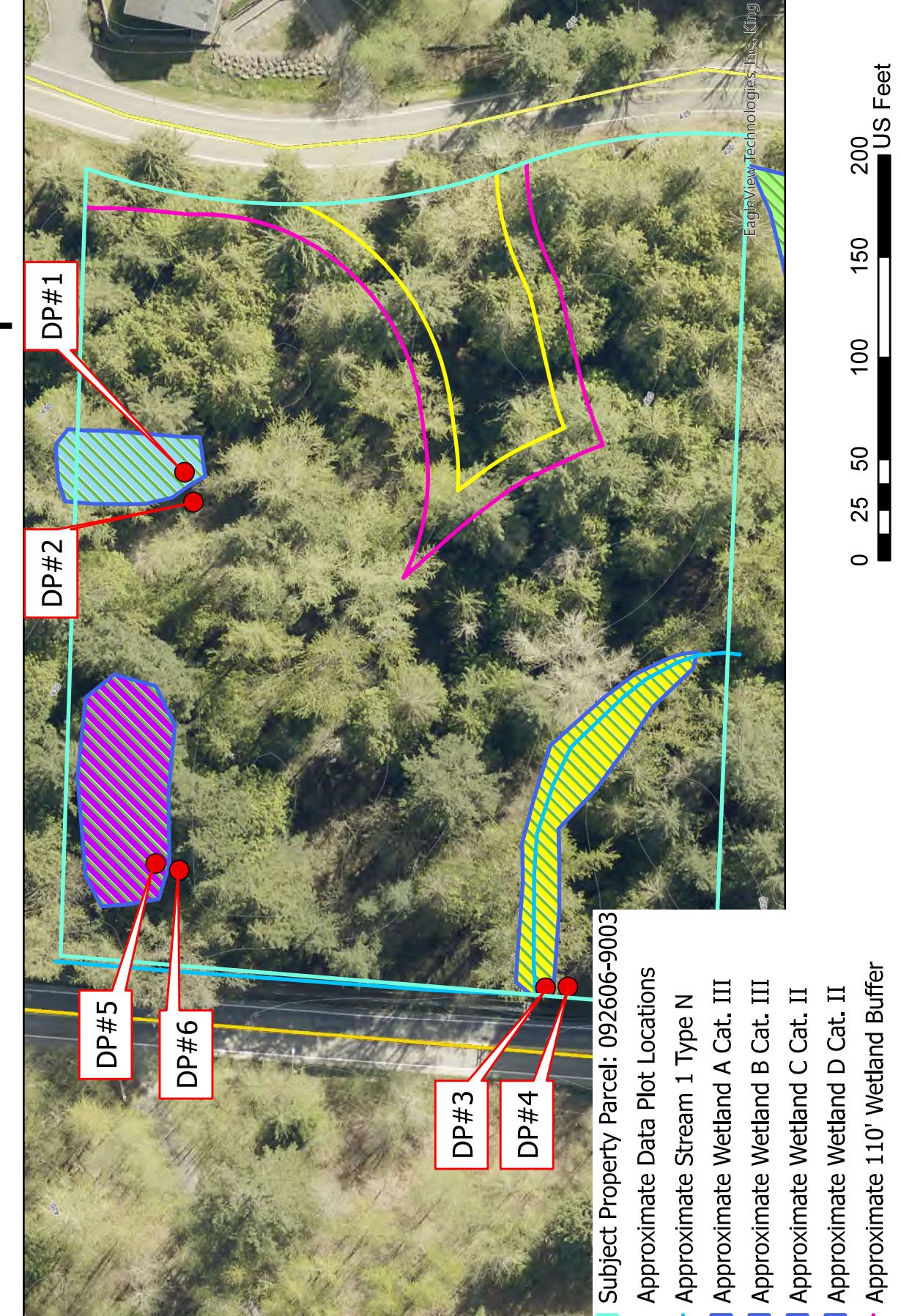
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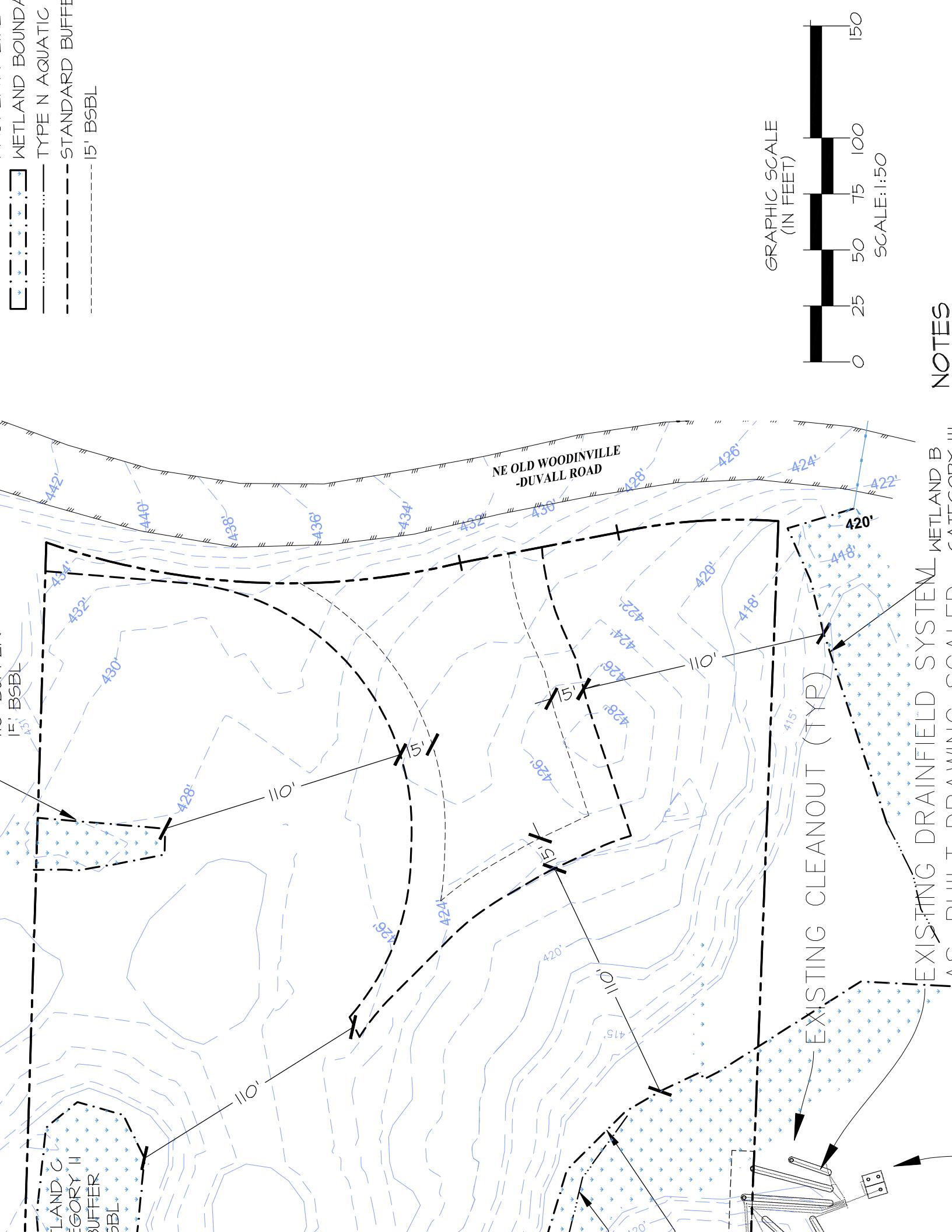
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King County
Parcel 092606-9003

Critical Areas Map

AOA-5438





ATTACHMENT A

DATA SHEETS

TP #1 ~5' INTO WETLAND AT A-9

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

Project/Site: PARCEL 092-606-9003 City/County: KING Sampling Date: 05/11/17Applicant/Owner: AUGUST State: WA Sampling Point: TP 1Investigator(s): ALTMANN Section, Township, Range: SEC 9, T26N, R6E W.M.Landform (hillslope, terrace, etc.): DEPRESSION / SWALE Local relief (concave, convex, none): CONCAVE Slope (%): _____Subregion (LRR): A Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: _____ NWI classification: _____

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

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>5' R</u>)		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <u>Populus trichocarpa</u>		<u>50</u>	<u>Y</u>	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC:	<u>4</u> (A)
2. _____					Total Number of Dominant Species Across All Strata:	<u>4</u> (B)
3. _____					Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>100</u> (A/B)
4. _____					Prevalence Index worksheet:	
		<u>50</u>	= Total Cover			Total % Cover of: _____ Multiply by: _____
Sapling/Shrub Stratum (Plot size: <u>5' R</u>)		<u>30</u>	<u>Y</u>	<u>FAC</u>	OBL species	_____ x 1 = _____
1. <u>Rubus spectabilis</u>		<u>30</u>	<u>Y</u>	<u>FAC</u>	FACW species	_____ x 2 = _____
2. <u>Acer circinatum</u>		<u>30</u>	<u>Y</u>	<u>FAC</u>	FAC species	_____ x 3 = _____
3. _____					FACU species	_____ x 4 = _____
4. _____					UPL species	_____ x 5 = _____
5. _____					Column Totals: _____ (A) _____ (B)	
Herb Stratum (Plot size: <u>5' R</u>)		<u>60</u>	= Total Cover			Prevalence Index = B/A = _____
1. <u>Athyrium filix-femina</u>		<u>20</u>	<u>Y</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators:	
2. _____					1 - Rapid Test for Hydrophytic Vegetation	
3. _____					X 2 - Dominance Test is >50%	
4. _____					3 - Prevalence Index is ≤3.0 ¹	
5. _____					4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
6. _____					5 - Wetland Non-Vascular Plants ¹	
7. _____					Problematic Hydrophytic Vegetation ¹ (Explain)	
8. _____					¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
9. _____						
10. _____						
11. _____						
		<u>20</u>	= Total Cover			
Woody Vine Stratum (Plot size: _____)						
1. _____						
2. _____						
% Bare Ground in Herb Stratum <u>50</u>						
Remarks:						
Hydrophytic Vegetation Present?		Yes <input checked="" type="checkbox"/> No _____				

SOIL

Sampling Point: TP 1

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

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

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

Indicators for Problematic Hydric Soils³:

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

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one)

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

Secondary Indicators (2 or more required)

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

Field Observations:

Surface Water Present? Yes No Depth (inches):

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

Saturation Present? Yes No Depth (inches): Surface

Wetland Hydrology Present? Yes No

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

Remarks:

TP #2 ~ 10' INTO UPLAND AT A-9

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

Project/Site: PARCEL 092606-9003 City/County: KING Sampling Date: 05/11/17Applicant/Owner: AUGUST State: WA Sampling Point: TP 2Investigator(s): ALTMANN Section, Township, Range: SEC 9, T26N, R6E W.M.Landform (hillslope, terrace, etc.): TERFACE Local relief (concave, convex, none): CONCAVE Slope (%): _____Subregion (LRR): A Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: _____ NWI classification: _____

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

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: <u>10' R</u>)		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <u>Acer circinatum</u>		<u>60</u>	<u>Y</u>	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC:	<u>3</u> (A)
2. _____					Total Number of Dominant Species Across All Strata:	<u>4</u> (B)
3. _____					Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>75</u> (A/B)
4. _____					Prevalence Index worksheet:	
		<u>60</u> = Total Cover		Total % Cover of: _____ Multiply by: _____		
Sapling/Shrub Stratum (Plot size: <u>10' R</u>)		<u>50</u>	<u>Y</u>	<u>FAC</u>	OBL species	<u>x 1 =</u> _____
1. <u>Acer circinatum</u>		<u>10</u>	<u>N</u>	<u>FAC</u>	FACW species	<u>x 2 =</u> _____
2. <u>Rubus Spectabilis</u>					FAC species	<u>x 3 =</u> _____
3. _____					FACU species	<u>x 4 =</u> _____
4. _____					UPL species	<u>x 5 =</u> _____
5. _____					Column Totals: _____ (A) _____ (B)	
		<u>60</u> = Total Cover		Prevalence Index = B/A = _____		
Herb Stratum (Plot size: <u>10' R</u>)		<u>60</u>	<u>Y</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators:	
1. <u>Polystichum munitum</u>		<u>30</u>	<u>Y</u>	<u>FAC</u>	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
2. <u>Amelanchier alnifolia</u>					<input checked="" type="checkbox"/> 2 - Dominance Test is >50%	
3. _____					<input type="checkbox"/> 3 - Prevalence Index is $\leq 3.0^1$	
4. _____					<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
5. _____					<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹	
6. _____					<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)	
7. _____					¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
8. _____						
9. _____						
10. _____						
11. _____						
		<u>90</u> = Total Cover		Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____		
Woody Vine Stratum (Plot size: _____)						
1. _____						
2. _____						
		<u> </u> = Total Cover				
% Bare Ground in Herb Stratum _____						
Remarks:						

TP # 3 ~10' INTO WETLAND AT D-20

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

Project/Site: PARCEL 092606-9003 City/County: KING Sampling Date: 05/11/17Applicant/Owner: AUGUST State: WA Sampling Point: TP 3Investigator(s): ALTMANN Section, Township, Range: SEC 9, T26N, R 6E W.M.Landform (hillslope, terrace, etc.): SLOPE ADJACENT STREAM Local relief (concave, convex, none): CONCAVE Slope (%): _____Subregion (LRR): IA Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: _____ NWI classification: _____

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

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>10' R</u>)		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:		
1.	<u>Acer circinatum</u>	<u>40</u>	<u>Y</u>	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC:	<u>6</u> (A)	
2.	_____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	<u>6</u> (B)	
3.	_____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>100</u> (A/B)	
4.	_____	_____	_____	_____	Prevalence Index worksheet:		
		<u>40</u>	= Total Cover			Total % Cover of: _____ Multiply by: _____	
Sapling/Shrub Stratum (Plot size: <u>10' R</u>)		<u>60</u>	<u>Y</u>	<u>FAC</u>	OBL species	x 1 = _____	
1.	<u>Acer circinatum</u>	<u>30</u>	<u>Y</u>	<u>FAC</u>	FACW species	x 2 = _____	
2.	<u>Rubus spectabilis</u>	_____	_____	_____	FAC species	x 3 = _____	
3.	_____	_____	_____	_____	FACU species	x 4 = _____	
4.	_____	_____	_____	_____	UPL species	x 5 = _____	
5.	_____	_____	_____	_____	Column Totals: _____ (A) _____ (B)		
		<u>90</u>	= Total Cover			Prevalence Index = B/A = _____	
Herb Stratum (Plot size: <u>10' R</u>)		<u>20</u>	<u>Y</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators:		
1.	<u>Athyrium filix-femina</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	1 - Rapid Test for Hydrophytic Vegetation		
2.	<u>Carex obnupta</u>	<u>10</u>	<u>Y</u>	<u>OBL</u>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%		
3.	<u>Lysichiton americanum</u>	<u>10</u>	<u>Y</u>	<u>OBL</u>	3 - Prevalence Index is ≤3.0 ¹		
4.	_____	_____	_____	_____	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
5.	_____	_____	_____	_____	5 - Wetland Non-Vascular Plants ¹		
6.	_____	_____	_____	_____	Problematic Hydrophytic Vegetation ¹ (Explain)		
7.	_____	_____	_____	_____	1 - Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
8.	_____	_____	_____	_____			
9.	_____	_____	_____	_____			
10.	_____	_____	_____	_____			
11.	_____	_____	_____	_____			
		<u>50</u>	= Total Cover				
Woody Vine Stratum (Plot size: _____)		_____	_____	_____	Hydrophytic Vegetation Present?		
1.	_____	_____	_____	_____	Yes <input checked="" type="checkbox"/>	No _____	
2.	_____	_____	_____	_____			
% Bare Ground in Herb Stratum _____		_____	= Total Cover				
Remarks:							

SOIL

Sampling Point: TP 3

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

Surface Water Present? Yes No Depth (inches):

Water Table Present? Yes No Depth (inches): 15"

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

Wetland Hydrology Present? Yes X No _____

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

Remarks:

TP #4 ~10' INTO UPLAND AT D-20

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

Project/Site: PARCEL 092606-9003 City/County: KING Sampling Date: 05/11/17

Applicant/Owner: AUGUST State: WA Sampling Point: TP 4

Investigator(s): ALTMANN Section, Township, Range: SEC 9, T26N, R6E W.M.

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

Subregion (LRR): A Lat: Long: Datum:

Soil Map Unit Name: NWI classification:

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

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 10' x 10')		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <i>Thuja plicata</i>		40	Y	FAC	Number of Dominant Species That Are OBL, FACW, or FAC:	3 (A)
2. <i>Acer circinatum</i>		30	Y	FAC	Total Number of Dominant Species Across All Strata:	5 (B)
3. <i>Acer macrophyllum</i>		30	Y	FACU	Percent of Dominant Species That Are OBL, FACW, or FAC:	60 (A/B)
4. _____		100	= Total Cover		Prevalence Index worksheet:	
Sapling/Shrub Stratum (Plot size: 10' x 10')		60	Y	FAC	Total % Cover of:	Multiply by:
1. <i>Acer circinatum</i>		60	Y	FAC	OBL species	x 1 =
2. _____		_____	_____	_____	FACW species	x 2 =
3. _____		_____	_____	_____	FAC species	x 3 =
4. _____		_____	_____	_____	FACU species	x 4 =
5. _____		_____	_____	_____	UPL species	x 5 =
Herb Stratum (Plot size: 10' x 10')		60	= Total Cover		Column Totals: (A) _____ (B) _____	Prevalence Index = B/A = _____
1. <i>Polygonatum multiflorum</i>		70	Y	FACU	Hydrophytic Vegetation Indicators:	
2. _____		_____	_____	_____	1 - Rapid Test for Hydrophytic Vegetation	
3. _____		_____	_____	_____	X 2 - Dominance Test is >50%	
4. _____		_____	_____	_____	3 - Prevalence Index is ≤3.0 ¹	
5. _____		_____	_____	_____	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
6. _____		_____	_____	_____	5 - Wetland Non-Vascular Plants ¹	
7. _____		_____	_____	_____	Problematic Hydrophytic Vegetation ¹ (Explain)	
8. _____		_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
9. _____		_____	_____	_____	Hydrophytic Vegetation Present?	
10. _____		_____	_____	_____	Yes <input checked="" type="checkbox"/> No _____	
11. _____		_____	_____	_____	Remarks:	
Woody Vine Stratum (Plot size: _____)		70	= Total Cover			
1. _____		_____	_____	_____		
2. _____		_____	_____	_____		
% Bare Ground in Herb Stratum _____		_____	= Total Cover			

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

Project Site: <u>Parcel 0926069003</u>	City/County: <u>/King</u>	Sampling Date: <u>8-19-25</u>
Applicant/Owner: <u>Hall</u>	State: <u>WA</u>	Sampling Point: <u>DP#5</u>
Investigator(s): <u>Dain Altmann, Jason Panzera</u>	Section, Township, Range: <u>S9.T26N.R6E</u>	
Landform (hillslope, terrace, etc.): _____	Local relief (concave, convex, none): _____	Slope (%): _____
Subregion (LRR): <u>A</u>	Lat: <u>47.756405</u>	Long: <u>-122.03923</u>
Soil Map Unit Name: <u>AqC</u>	Datum: _____	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)		
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> , significantly disturbed? Are "Normal Circumstances" present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> , naturally problematic? (If needed, explain any answers in Remarks.)		

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

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampled Area within a Wetland?
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Remarks: Located 10' into wetland C at C-2.			

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC:	<u>2</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	<u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>66</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet:	
50% = _____, 20% = _____	_____	= Total Cover		Total % Cover of:	Multiply by:
Sapling/Shrub Stratum (Plot size: 10')				OBL species	_____ x1 = _____
1. <u>Rubus spectabilis</u>	<u>20</u>	<u>yes</u>	<u>FAC</u>	FACW species	_____ x2 = _____
2. _____	_____	_____	_____	FAC species	_____ x3 = _____
3. _____	_____	_____	_____	FACU species	_____ x4 = _____
4. _____	_____	_____	_____	UPL species	_____ x5 = _____
5. _____	_____	_____	_____	Column Totals:	<u>(A)</u> <u>(B)</u>
50% = <u>10</u> , 20% = <u>4</u>	<u>20</u>	= Total Cover		Prevalence Index = B/A = _____	
Herb Stratum (Plot size: 10')					
1. <u>Polystichum munitum</u>	<u>30</u>	<u>yes</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators:	
2. <u>Athyrium filix-femina</u>	<u>30</u>	<u>yes</u>	<u>FAC</u>	<input type="checkbox"/> 1 – Rapid Test for Hydrophytic Vegetation	
3. _____	_____	_____	_____	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%	
4. _____	_____	_____	_____	<input type="checkbox"/> 3 - Prevalence Index is <u>≤3.0</u>	
5. _____	_____	_____	_____	<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
6. _____	_____	_____	_____	<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹	
7. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)	
8. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
9. _____	_____	_____	_____	Hydrophytic Vegetation Present?	
10. _____	_____	_____	_____	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
11. _____	_____	_____	_____	Remarks:	
50% = <u>30</u> , 20% = <u>12</u>	<u>60</u>	= Total Cover		_____	
Woody Vine Stratum (Plot size: _____)					
1. _____	_____	_____	_____	_____	
2. _____	_____	_____	_____	_____	
50% = _____, 20% = _____	_____	= Total Cover		_____	
% Bare Ground in Herb Stratum _____					

soil

HYDROLOGY

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

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

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

Remarks: dry

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

Project Site: <u>Parcel 0926069003</u>	City/County: <u>/King</u>	Sampling Date: <u>8-19-25</u>
Applicant/Owner: <u>Hall</u>	State: <u>WA</u>	Sampling Point: <u>DP#6</u>
Investigator(s): <u>Dain Altmann, Jason Panzera</u>	Section, Township, Range: <u>S9,T26N,R6E</u>	
Landform (hillslope, terrace, etc.): _____	Local relief (concave, convex, none): _____	Slope (%): _____
Subregion (LRR): <u>A</u>	Lat: <u>47.756405</u>	Long: <u>-122.03923</u>
Soil Map Unit Name: <u>AqC</u>	Datum: _____	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, explain in Remarks.)		
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> , significantly disturbed? Are "Normal Circumstances" present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Are Vegetation <input type="checkbox"/> , Soil <input type="checkbox"/> , or Hydrology <input type="checkbox"/> , naturally problematic? (If needed, explain any answers in Remarks.)		

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

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	No <input checked="" type="checkbox"/>
Remarks: Located 10' into wetland C at C-2.			

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size: <u>10'</u>)				Dominance Test Worksheet:			
1. <u><i>Pseudotsuga menziesii</i></u>	<u>60</u>	<u>yes</u>	<u>FACU</u>	Number of Dominant Species That Are OBL, FACW, or FAC:	<u>1</u>	(A)	
2. <u><i>Thuja plicata</i></u>	<u>40</u>	<u>yes</u>	<u>FAC</u>	Total Number of Dominant Species Across All Strata:	<u>4</u>	(B)	
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>25</u>	(A/B)	
4. _____	_____	_____	_____				
50% = <u>50</u> , 20% = <u>20</u>	<u>100</u>	= Total Cover					
Sapling/Shrub Stratum (Plot size: <u>10'</u>)				Prevalence Index worksheet:			
1. _____	_____	_____	_____	Total % Cover of:	Multiply by:		
2. _____	_____	_____	_____	OBL species	x1 =	_____	
3. _____	_____	_____	_____	FACW species	x2 =	_____	
4. _____	_____	_____	_____	FAC species	x3 =	_____	
5. _____	_____	_____	_____	FACU species	x4 =	_____	
50% = <u>10</u> , 20% = <u>4</u>	<u>80</u>	= Total Cover		UPL species	x5 =	_____	
Herb Stratum (Plot size: <u>10'</u>)				Column Totals:	(A)	(B)	
1. <u><i>Polystichum munitum</i></u>	<u>80</u>	<u>yes</u>	<u>FACU</u>	Prevalence Index = B/A = _____			
2. _____	_____	_____	_____				
3. _____	_____	_____	_____				
4. _____	_____	_____	_____				
5. _____	_____	_____	_____				
6. _____	_____	_____	_____				
7. _____	_____	_____	_____				
8. _____	_____	_____	_____				
9. _____	_____	_____	_____				
10. _____	_____	_____	_____				
11. _____	_____	_____	_____				
50% = <u>40</u> , 20% = <u>16</u>	<u>80</u>	= Total Cover					
Woody Vine Stratum (Plot size: <u>10'</u>)				Hydrophytic Vegetation Indicators:			
1. <u><i>Rubus ursinus</i></u>	<u>20</u>	<u>yes</u>	<u>FACU</u>	<input type="checkbox"/> 1 – Rapid Test for Hydrophytic Vegetation			
2. _____	_____	_____	_____	<input type="checkbox"/> 2 - Dominance Test is >50%			
50% = <u>10</u> , 20% = <u>4</u>	<u>20</u>	= Total Cover		<input type="checkbox"/> 3 - Prevalence Index is <u>≤3.0</u>			
% Bare Ground in Herb Stratum _____				<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
				<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹			
				<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)			
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.							
				Hydrophytic Vegetation Present?			
				Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		
Remarks:							

SOIL

HYDROLOGY

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

ATTACHMENT B

WETLAND RATING

RATING SUMMARY – Western Washington

Name of wetland (or ID #): Parcel 092606-9003

Date of site visit: 10/3/2023

Rated by Altmann

Trained by Ecology? Yes No

Date of training 03/08 & 03/15

HGM Class used for rating Depressional & Flats

Wetland has multiple HGM classes? Yes No

NOTE: Form is not complete with out the figures requested (figures can be combined).

Source of base aerial photo/map King County iMAP

OVERALL WETLAND CATEGORY III (based on functions or special characteristics)

1. Category of wetland based on FUNCTIONS

- Category I - Total score = 23 - 27
- Category II - Total score = 20 - 22
- X Category III - Total score = 16 - 19
- Category IV - Total score = 9 - 15

Score for each function based on three ratings
(order of ratings is not important)

9 = H, H, H
8 = H, H, M
7 = H, H, L
7 = H, M, M
6 = H, M, L
6 = M, M, M
5 = H, L, L
5 = M, M, L
4 = M, L, L
3 = L, L, L

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>List appropriate rating (H, M, L)</i>				
Site Potential	M	M	L	
Landscape Potential	M	M	M	
Value	H	M	H	Total
Score Based on Ratings	7	6	6	19

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	Category
Estuarine	
Wetland of High Conservation Value	
Bog	
Mature Forest	
Old Growth Forest	
Coastal Lagoon	
Interdunal	
None of the above	X

D 1.1. Characteristics of surface water outflows from the wetland:

Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet).	points = 3	
Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet.	points = 2	3
<input type="checkbox"/> Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 1	
<input type="checkbox"/> Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch.	points = 1	

D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions).

Yes = 4 No = 0

0

D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes):

Wetland has persistent, ungrazed, plants > 95% of area	points = 5	
Wetland has persistent, ungrazed, plants > ½ of area	points = 3	
Wetland has persistent, ungrazed plants > $\frac{1}{10}$ of area	points = 1	
Wetland has persistent, ungrazed plants < $\frac{1}{10}$ of area	points = 0	

D 1.4. Characteristics of seasonal ponding or inundation:

This is the area that is ponded for at least 2 months. See description in manual.

Area seasonally ponded is > ½ total area of wetland	points = 4	
Area seasonally ponded is > ¼ total area of wetland	points = 2	
Area seasonally ponded is < ¼ total area of wetland	points = 0	

Total for D 1

Add the points in the boxes above

10

Rating of Site Potential If score is: 12 - 16 = H 6 - 11 = M 0 - 5 = L Record the rating on the first page

D 2.0. Does the landscape have the potential to support the water quality function of the site?

D 2.1. Does the wetland unit receive stormwater discharges?	Yes = 1 No = 0	0
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants?	Yes = 1 No = 0	1
D 2.3. Are there septic systems within 250 ft of the wetland?	Yes = 1 No = 0	1
D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1 - D 2.3?		0
Source	Yes = 1 No = 0	

Total for D 2

Add the points in the boxes above

2

Rating of Landscape Potential If score is: 3 or 4 = H 1 or 2 = M 0 = L Record the rating on the first page

D 3.0. Is the water quality improvement provided by the site valuable to society?

D 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list?	Yes = 1 No = 0	0
D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list?	Yes = 1 No = 0	1
D 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality (answer YES if there is a TMDL for the basin in which the unit is found)?	Yes = 2 No = 0	2
Total for D 3	Add the points in the boxes above	3

Rating of Value If score is: 2 - 4 = H 1 = M 0 = L

Record the rating on the first page

D 4.1. Characteristics of surface water outflows from the wetland:

Wetland is a depression or flat depression with no surface water leaving it (no outlet)	points = 4	
Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet	points = 2	4
Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch	points = 1	
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	

D 4.2. Depth of storage during wet periods: *Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part.*

Marks of ponding are 3 ft or more above the surface or bottom of outlet	points = 7	
Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet	points = 5	0
<input type="checkbox"/> Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet	points = 3	
<input type="checkbox"/> The wetland is a "headwater" wetland	points = 3	
Wetland is flat but has small depressions on the surface that trap water	points = 1	
Marks of ponding less than 0.5 ft (6 in)	points = 0	

D 4.3. Contribution of the wetland to storage in the watershed: *Estimate the ratio of the area of upstream basin contributing surface water to the wetland to the area of the wetland unit itself.*

<input type="checkbox"/> The area of the basin is less than 10 times the area of the unit	points = 5	
The area of the basin is 10 to 100 times the area of the unit	points = 3	
The area of the basin is more than 100 times the area of the unit	points = 0	
<input type="checkbox"/> Entire wetland is in the Flats class	points = 5	

Total for D 4	Add the points in the boxes above	7
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Rating of Site Potential If score is: 12 - 16 = H 6 - 11 = M 0 - 5 = L *Record the rating on the first page*

D 5.0. Does the landscape have the potential to support hydrologic function of the site?

D 5.1. Does the wetland unit receive stormwater discharges?	Yes = 1	No = 0	0
---	---------	--------	---

D 5.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate excess runoff?	Yes = 1	No = 0	1
--	---------	--------	---

D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)?	Yes = 1	No = 0	0
---	---------	--------	---

Total for D 5	Add the points in the boxes above	1
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Rating of Landscape Potential If score is: 3 = H 1 or 2 = M 0 = L *Record the rating on the first page*

D 6.0. Are the hydrologic functions provided by the site valuable to society?

D 6.1. <u>The unit is in a landscape that has flooding problems.</u> Choose the description that best matches conditions around the wetland unit being rated. Do not add points. <u>Choose the highest score if more than one condition is met.</u>		
---	--	--

The wetland captures surface water that would otherwise flow down-gradient into areas where flooding has damaged human or natural resources (e.g., houses or salmon redds):		
<input type="checkbox"/> Flooding occurs in a sub-basin that is immediately down-gradient of unit.	points = 2	
<input checked="" type="checkbox"/> Surface flooding problems are in a sub-basin farther down-gradient.	points = 1	1
<input type="checkbox"/> Flooding from groundwater is an issue in the sub-basin.	points = 1	
<input type="checkbox"/> The existing or potential outflow from the wetland is so constrained by human or natural conditions that the water stored by the wetland cannot reach areas that flood. Explain why	points = 0	
<input type="checkbox"/> There are no problems with flooding downstream of the wetland.	points = 0	

D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan?	Yes = 2	No = 0	0
--	---------	--------	---

H 1.1. Structure of plant community: *Indicators are Cowardin classes and strata within the Forested class*. Check the Cowardin plant classes in the wetland. *Up to 10 patches may be combined for each class to meet the threshold of 1/4 ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.*

<input type="checkbox"/> Aquatic bed <input type="checkbox"/> Emergent <input checked="" type="checkbox"/> Scrub-shrub (areas where shrubs have > 30% cover) <input checked="" type="checkbox"/> Forested (areas where trees have > 30% cover) <i>If the unit has a Forested class, check if:</i> <input checked="" type="checkbox"/> The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon	4 structures or more: points = 4 3 structures: points = 2 2 structures: points = 1 1 structure: points = 0	2
---	---	---

H 1.2. Hydroperiods

Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or 1/4 ac to count (see text for descriptions of hydroperiods).

<input type="checkbox"/> Permanently flooded or inundated <input checked="" type="checkbox"/> Seasonally flooded or inundated <input type="checkbox"/> Occasionally flooded or inundated <input checked="" type="checkbox"/> Saturated only <input type="checkbox"/> Permanently flowing stream or river in, or adjacent to, the wetland <input type="checkbox"/> Seasonally flowing stream in, or adjacent to, the wetland <input type="checkbox"/> Lake Fringe wetland <input type="checkbox"/> Freshwater tidal wetland	4 or more types present: points = 3 3 types present: points = 2 2 types present: points = 1 1 types present: points = 0	1
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H 1.3. Richness of plant species

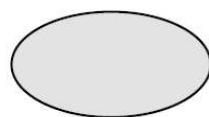
Count the number of plant species in the wetland that cover at least 10 ft².

Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

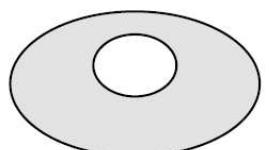
If you counted:	> 19 species	points = 2
	5 - 19 species	points = 1
	< 5 species	points = 0

H 1.4. Interspersion of habitats

Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



None = 0 points

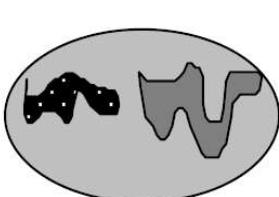
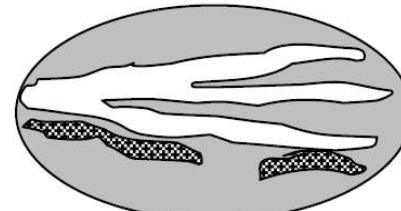


Low = 1 point



Moderate = 2 points

1



All three diagrams in this row are
HIGH = 3 points

- Standing snags (dbh > 4 in) within the wetland
- Undercut banks are present for at least 6.6 ft (2 m) **and/or** overhanging plants extends at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m)
- Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (*cut shrubs or trees that have not yet weathered where wood is exposed*)
- At least 1/4 ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (*structures for egg-laying by amphibians*)
- Invasive plants cover less than 25% of the wetland area in every stratum of plants (see *H 1.1 for list of strata*)

1

Total for H 1

Add the points in the boxes above

6

Rating of Site Potential If Score is: 15 - 18 = H 7 - 14 = M 0 - 6 = L Record the rating on the first page

H 2.0. Does the landscape have the potential to support the habitat function of the site?

H 2.1 Accessible habitat (include *only habitat that directly abuts wetland unit*).

Calculate:

$$5.8 \% \text{ undisturbed habitat} + (\underline{7.5 \% \text{ moderate \& low intensity land uses / 2}}) = 9.55\%$$

0

If total accessible habitat is:

- > $\frac{1}{3}$ (33.3%) of 1 km Polygon points = 3
- 20 - 33% of 1 km Polygon points = 2
- 10 - 19% of 1 km Polygon points = 1
- < 10 % of 1 km Polygon points = 0

H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.

Calculate:

$$43.9 \% \text{ undisturbed habitat} + (\underline{28.5 \% \text{ moderate \& low intensity land uses / 2}}) = 58.15\%$$

3

- Undisturbed habitat > 50% of Polygon points = 3
- Undisturbed habitat 10 - 50% and in 1-3 patches points = 2
- Undisturbed habitat 10 - 50% and > 3 patches points = 1
- Undisturbed habitat < 10% of 1 km Polygon points = 0

H 2.3 Land use intensity in 1 km Polygon: If

- > 50% of 1 km Polygon is high intensity land use points = (-2)
- \leq 50% of 1km Polygon is high intensity points = 0

0

Total for H 2

Add the points in the boxes above

3

Rating of Landscape Potential If Score is: 4 - 6 = H 1 - 3 = M < 1 = L Record the rating on the first page

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

H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? Choose only the highest score that applies to the wetland being rated.

Site meets ANY of the following criteria:

points = 2

- It has 3 or more priority habitats within 100 m (see next page)
- It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)
- It is mapped as a location for an individual WDFW priority species
- It is a Wetland of High Conservation Value as determined by the Department of Natural Resources
- It has been categorized as an important habitat site in a local or regional comprehensive plan, in a Shoreline Master Plan, or in a watershed plan

2

Site has 1 or 2 priority habitats (listed on next page) with in 100m

points = 1

Site does not meet any of the criteria above

points = 0

<http://wdfw.wa.gov/publications/00165/wdfw00165.pdf> or access the list from here:

<http://wdfw.wa.gov/conservation/phs/list/>

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

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

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

RATING SUMMARY – Western Washington

Name of wetland (or ID #): Parcel 092606-9003

Date of site visit: 10/3/2023

Rated by Altmann

Trained by Ecology? Yes No

Date of training 03/08 & 03/15

HGM Class used for rating Slope

Wetland has multiple HGM classes? Yes No

NOTE: Form is not complete with out the figures requested (figures can be combined).

Source of base aerial photo/map King County iMAP

OVERALL WETLAND CATEGORY III (based on functions or special characteristics)

1. Category of wetland based on FUNCTIONS

 Category I - Total score = 23 - 27
 Category II - Total score = 20 - 22
X Category III - Total score = 16 - 19
 Category IV - Total score = 9 - 15

Score for each function based on three ratings
(order of ratings is not important)

9 = H, H, H
8 = H, H, M
7 = H, H, L
7 = H, M, M
6 = H, M, L
6 = M, M, M
5 = H, L, L
5 = M, M, L
4 = M, L, L
3 = L, L, L

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>List appropriate rating (H, M, L)</i>				
Site Potential	M	L	M	
Landscape Potential	M	M	M	
Value	H	M	H	Total
Score Based on Ratings	7	5	7	19

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	Category
Estuarine	
Wetland of High Conservation Value	
Bog	
Mature Forest	
Old Growth Forest	
Coastal Lagoon	
Interdunal	
None of the above	X

S 1.0. Does the site have the potential to improve water quality?

S 1.1. Characteristics of the average slope of the wetland: (a 1% slope has a 1 ft vertical drop in elevation for every 100 ft of horizontal distance)

Slope is 1% or less	points = 3	0
Slope is > 1% - 2%	points = 2	
Slope is > 2% - 5%	points = 1	
Slope is greater than 5%	points = 0	

S 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic

(use NRCS definitions):

Yes = 3 No = 0

3

S 1.3. Characteristics of the plants in the wetland that trap sediments and pollutants:

Choose the points appropriate for the description that best fits the plants in the wetland. *Dense* means you have trouble seeing the soil surface (>75% cover), and *uncut* means not grazed or mowed and plants are higher than 6 in.

Dense, uncut, herbaceous plants > 90% of the wetland area	points = 6	3
Dense, uncut, herbaceous plants > ½ of area	points = 3	
Dense, woody, plants > ½ of area	points = 2	
Dense, uncut, herbaceous plants > ¼ of area	points = 1	
Does not meet any of the criteria above for plants	points = 0	

Total for S 1

Add the points in the boxes above

6

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

S 2.0. Does the landscape have the potential to support the water quality function of the site?

S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in

land uses that generate pollutants?

Yes = 1 No = 0

1

S 2.2. Are there other sources of pollutants coming into the wetland that are

not listed in question S 2.1?

Yes = 1 No = 0

0

Other Sources

Total for S 2

Add the points in the boxes above

1

Rating of Landscape Potential If score is: 1 - 2 = M 0 = L Record the rating on the first page

S 3.0. Is the water quality improvement provided by the site valuable to society?

S 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list?

Yes = 1 No = 0

0

S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue?

At least one aquatic resource in the basin is on the 303(d) list.

Yes = 1 No = 0

1

S 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? Answer YES if there is a TMDL for the basin in which the unit is found?

Yes = 2 No = 0

2

Total for S 3

Add the points in the boxes above

3

Rating of Value If score is: 2 - 4 = H 1 = M 0 = L

Record the rating on the first page

S 4.0. Does the site have the potential to reduce flooding and stream erosion?

S 4.1. Characteristics of plants that reduce the velocity of surface flows during storms: Choose the points appropriate for the description that best fits conditions in the wetland. *Stems of plants should be thick enough (usually > $1/8$ in), or dense enough, to remain erect during surface flows.*

0

Dense, uncut, **rigid** plants cover > 90% of the area of the wetland

points = 1

All other conditions

points = 0

Rating of Site Potential If score is: 1 = M 0 = L

Record the rating on the first page

S 5.0. Does the landscape have the potential to support hydrologic functions of the site?

S 5.1. Is more than 25% of the area within 150 ft upslope of wetland in land uses or cover that generate excess surface runoff?

Yes = 1 No = 0

1

Rating of Landscape Potential If score is: 1 = M 0 = L

Record the rating on the first page

S 6.0. Are the hydrologic functions provided by the site valuable to society?

S 6.1. Distance to the nearest areas downstream that have flooding problems:

The sub-basin immediately down-gradient of site has flooding problems that result in damage to human or natural resources (e.g., houses or salmon redds)

points = 2

1

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

points = 1

No flooding problems anywhere downstream

points = 0

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

Yes = 2 No = 0

0

Total for S 6

Add the points in the boxes above

1

Rating of Value If score is: 2 - 4 = H 1 = M 0 = L

Record the rating on the first page

NOTES and FIELD OBSERVATIONS:

H 1.1. Structure of plant community: *Indicators are Cowardin classes and strata within the Forested class*. Check the Cowardin plant classes in the wetland. *Up to 10 patches may be combined for each class to meet the threshold of 1/4 ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.*

<input type="checkbox"/> Aquatic bed <input type="checkbox"/> Emergent <input checked="" type="checkbox"/> Scrub-shrub (areas where shrubs have > 30% cover) <input checked="" type="checkbox"/> Forested (areas where trees have > 30% cover) <i>If the unit has a Forested class, check if:</i> <input checked="" type="checkbox"/> The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon	4 structures or more: points = 4 3 structures: points = 2 2 structures: points = 1 1 structure: points = 0	2
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H 1.2. Hydroperiods

Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or 1/4 ac to count (see text for descriptions of hydroperiods).

<input type="checkbox"/> Permanently flooded or inundated <input type="checkbox"/> Seasonally flooded or inundated <input checked="" type="checkbox"/> Occasionally flooded or inundated <input checked="" type="checkbox"/> Saturated only <input type="checkbox"/> Permanently flowing stream or river in, or adjacent to, the wetland <input checked="" type="checkbox"/> Seasonally flowing stream in, or adjacent to, the wetland <input type="checkbox"/> Lake Fringe wetland <input type="checkbox"/> Freshwater tidal wetland	4 or more types present: points = 3 3 types present: points = 2 2 types present: points = 1 1 types present: points = 0	2
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H 1.3. Richness of plant species

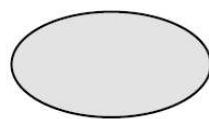
Count the number of plant species in the wetland that cover at least 10 ft².

Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

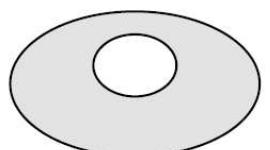
If you counted:	> 19 species	points = 2
	5 - 19 species	points = 1
	< 5 species	points = 0

H 1.4. Interspersion of habitats

Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



None = 0 points

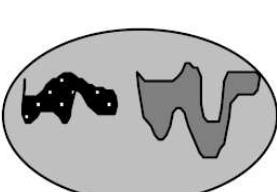
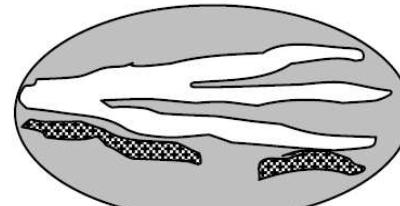


Low = 1 point



Moderate = 2 points

2



All three diagrams in this row are
HIGH = 3 points

- Standing snags (dbh > 4 in) within the wetland
- Undercut banks are present for at least 6.6 ft (2 m) **and/or** overhanging plants extends at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m)
- Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (*cut shrubs or trees that have not yet weathered where wood is exposed*)
- At least 1/4 ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (*structures for egg-laying by amphibians*)
- Invasive plants cover less than 25% of the wetland area in every stratum of plants (see *H 1.1 for list of strata*)

3

Total for H 1

Add the points in the boxes above

10

Rating of Site Potential If Score is: 15 - 18 = H 7 - 14 = M 0 - 6 = L Record the rating on the first page

H 2.0. Does the landscape have the potential to support the habitat function of the site?

H 2.1 Accessible habitat (include *only habitat that directly abuts wetland unit*).

Calculate:

$$5.3 \% \text{ undisturbed habitat} + (\underline{\hspace{2cm}} 6.8 \% \text{ moderate \& low intensity land uses / 2}) = 8.7\%$$

0

If total accessible habitat is:

- > 1/3 (33.3%) of 1 km Polygon points = 3
- 20 - 33% of 1 km Polygon points = 2
- 10 - 19% of 1 km Polygon points = 1
- < 10 % of 1 km Polygon points = 0

H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.

Calculate:

$$44.2 \% \text{ undisturbed habitat} + (\underline{\hspace{2cm}} 28 \% \text{ moderate \& low intensity land uses / 2}) = 58.2\%$$

3

- Undisturbed habitat > 50% of Polygon points = 3
- Undisturbed habitat 10 - 50% and in 1-3 patches points = 2
- Undisturbed habitat 10 - 50% and > 3 patches points = 1
- Undisturbed habitat < 10 % of 1 km Polygon points = 0

H 2.3 Land use intensity in 1 km Polygon: If

- > 50% of 1 km Polygon is high intensity land use points = (-2)
- ≤ 50% of 1km Polygon is high intensity points = 0

0

Total for H 2

Add the points in the boxes above

3

Rating of Landscape Potential If Score is: 4 - 6 = H 1 - 3 = M < 1 = L Record the rating on the first page

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

H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? Choose only the highest score that applies to the wetland being rated.

Site meets ANY of the following criteria:

points = 2

- It has 3 or more priority habitats within 100 m (see next page)
- It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)
- It is mapped as a location for an individual WDFW priority species
- It is a Wetland of High Conservation Value as determined by the Department of Natural Resources
- It has been categorized as an important habitat site in a local or regional comprehensive plan, in a Shoreline Master Plan, or in a watershed plan

2

Site has 1 or 2 priority habitats (listed on next page) with in 100m

points = 1

Site does not meet any of the criteria above

points = 0

<http://wdfw.wa.gov/publications/00165/wdfw00165.pdf> or access the list from here:

<http://wdfw.wa.gov/conservation/phs/list/>

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

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

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

RATING SUMMARY – Western Washington

Name of wetland (or ID #): Parcel 092606-9003Date of site visit: 8/19/2025Rated by AltmannTrained by Ecology? Yes NoDate of training 03/08 & 03/15HGM Class used for rating Depressional & FlatsWetland has multiple HGM classes? Yes No**NOTE: Form is not complete with out the figures requested (figures can be combined).**Source of base aerial photo/map King County iMAPOVERALL WETLAND CATEGORY II (based on functions or special characteristics)

1. Category of wetland based on FUNCTIONS

Category I - Total score = 23 - 27
 Category II - Total score = 20 - 22
 _____ Category III - Total score = 16 - 19
 _____ Category IV - Total score = 9 - 15

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
List appropriate rating (H, M, L)				
Site Potential	M	M	M	
Landscape Potential	M	M	M	
Value	H	M	H	Total
Score Based on Ratings	7	6	7	20

Score for each function based on three ratings
(order of ratings is not important)

9 = H, H, H
 8 = H, H, M
 7 = H, H, L
 7 = H, M, M
 6 = H, M, L
 6 = M, M, M
 5 = H, L, L
 5 = M, M, L
 4 = M, L, L
 3 = L, L, L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	Category
Estuarine	
Wetland of High Conservation Value	
Bog	
Mature Forest	
Old Growth Forest	
Coastal Lagoon	
Interdunal	
None of the above	<input checked="" type="checkbox"/>

DEPRESSATIONAL AND FLATS WETLANDS

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

D 1.0. Does the site have the potential to improve water quality?

D 1.1. Characteristics of surface water outflows from the wetland:

Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet).

points = 3

Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet.

points = 2

3

Wetland has an unstricted, or slightly constricted, surface outlet that is permanently flowing

points = 1

Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch.

points = 1

D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions).

Yes = 4 No = 0

0

D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes):

Wetland has persistent, ungrazed, plants > 95% of area

points = 5

3

Wetland has persistent, ungrazed, plants > 1/2 of area

points = 3

Wetland has persistent, ungrazed plants > 1/10 of area

points = 1

Wetland has persistent, ungrazed plants < 1/10 of area

points = 0

D 1.4. Characteristics of seasonal ponding or inundation:

This is the area that is ponded for at least 2 months. See description in manual.

Area seasonally ponded is > 1/2 total area of wetland

points = 4

2

Area seasonally ponded is > 1/4 total area of wetland

points = 2

Area seasonally ponded is < 1/4 total area of wetland

points = 0

Total for D 1

Add the points in the boxes above

8

Rating of Site Potential If score is: 12 - 16 = H 6 - 11 = M 0 - 5 = L Record the rating on the first page

D 2.0. Does the landscape have the potential to support the water quality function of the site?

D 2.1. Does the wetland unit receive stormwater discharges?

Yes = 1 No = 0

0

D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants?

Yes = 1 No = 0

1

D 2.3. Are there septic systems within 250 ft of the wetland?

Yes = 1 No = 0

1

D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1 - D 2.3?

Source

Yes = 1 No = 0

0

Total for D 2

Add the points in the boxes above

2

Rating of Landscape Potential If score is: 3 or 4 = H 1 or 2 = M 0 = L Record the rating on the first page

D 3.0. Is the water quality improvement provided by the site valuable to society?

D 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list?

Yes = 1 No = 0

0

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

Yes = 1 No = 0

1

D 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality (*answer YES if there is a TMDL for the basin in which the unit is found*)?

Yes = 2 No = 0

2

Total for D 3

Add the points in the boxes above

3

Rating of Value If score is: 2 - 4 = H 1 = M 0 = L

Record the rating on the first page

DEPRESSIONAL AND FLATS WETLANDS

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

D 4.0. Does the site have the potential to reduce flooding and erosion?		
D 4.1. Characteristics of surface water outflows from the wetland:		
Wetland is a depression or flat depression with no surface water leaving it (no outlet)	points = 4	
Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet	points = 2	4
Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch	points = 1	
Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 0	
D 4.2. Depth of storage during wet periods: <i>Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part.</i>		
Marks of ponding are 3 ft or more above the surface or bottom of outlet	points = 7	
Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet	points = 5	0
<input type="checkbox"/> Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet	points = 3	
<input type="checkbox"/> The wetland is a "headwater" wetland	points = 3	
Wetland is flat but has small depressions on the surface that trap water	points = 1	
Marks of ponding less than 0.5 ft (6 in)	points = 0	
D 4.3. Contribution of the wetland to storage in the watershed: <i>Estimate the ratio of the area of upstream basin contributing surface water to the wetland to the area of the wetland unit itself.</i>		
<input type="checkbox"/> The area of the basin is less than 10 times the area of the unit	points = 5	
The area of the basin is 10 to 100 times the area of the unit	points = 3	3
The area of the basin is more than 100 times the area of the unit	points = 0	
<input type="checkbox"/> Entire wetland is in the Flats class	points = 5	
Total for D 4	Add the points in the boxes above	7

Rating of Site Potential If score is: 12 - 16 = H 6 - 11 = M 0 - 5 = L Record the rating on the first page

D 5.0. Does the landscape have the potential to support hydrologic function of the site?		
D 5.1. Does the wetland unit receive stormwater discharges?	Yes = 1	No = 0
D 5.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate excess runoff?	Yes = 1	No = 0
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)?	Yes = 1	No = 0
Total for D 5	Add the points in the boxes above	1

Rating of Landscape Potential If score is: 3 = H 1 or 2 = M 0 = L Record the rating on the first page

D 6.0. Are the hydrologic functions provided by the site valuable to society?		
D 6.1. The unit is in a landscape that has flooding problems. Choose the description that best matches conditions around the wetland unit being rated. Do not add points. <u>Choose the highest score if more than one condition is met.</u>		
The wetland captures surface water that would otherwise flow down-gradient into areas where flooding has damaged human or natural resources (e.g., houses or salmon redds):		
<input type="checkbox"/> Flooding occurs in a sub-basin that is immediately down-gradient of unit.	points = 2	1
<input checked="" type="checkbox"/> Surface flooding problems are in a sub-basin farther down-gradient.	points = 1	
<input type="checkbox"/> Flooding from groundwater is an issue in the sub-basin.	points = 1	
<input type="checkbox"/> The existing or potential outflow from the wetland is so constrained by human or natural conditions that the water stored by the wetland cannot reach areas that flood. Explain why	points = 0	
<input type="checkbox"/> There are no problems with flooding downstream of the wetland.	points = 0	
D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan?	Yes = 2	No = 0
Total for D 6	Add the points in the boxes above	1

Rating of Value If score is: 2 - 4 = H 1 = M 0 = L Record the rating on the first page

These questions apply to wetlands of all HGM classes.

HABITAT FUNCTIONS - Indicators that site functions to provide important habitat

H 1.0. Does the site have the potential to provide habitat?

H 1.1. Structure of plant community: *Indicators are Cowardin classes and strata within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.*

<input type="checkbox"/> Aquatic bed	4 structures or more: points = 4	2
<input type="checkbox"/> Emergent	3 structures: points = 2	
<input checked="" type="checkbox"/> Scrub-shrub (areas where shrubs have > 30% cover)	2 structures: points = 1	
<input checked="" type="checkbox"/> Forested (areas where trees have > 30% cover)	1 structure: points = 0	

If the unit has a Forested class, check if:

<input checked="" type="checkbox"/> The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon
--

H 1.2. Hydroperiods

Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ ac to count (see text for descriptions of hydroperiods).

<input type="checkbox"/> Permanently flooded or inundated	4 or more types present: points = 3	1
<input checked="" type="checkbox"/> Seasonally flooded or inundated	3 types present: points = 2	
<input type="checkbox"/> Occasionally flooded or inundated	2 types present: points = 1	
<input checked="" type="checkbox"/> Saturated only	1 types present: points = 0	

<input type="checkbox"/> Permanently flowing stream or river in, or adjacent to, the wetland	
<input type="checkbox"/> Seasonally flowing stream in, or adjacent to, the wetland	
<input type="checkbox"/> Lake Fringe wetland	2 points
<input type="checkbox"/> Freshwater tidal wetland	2 points

H 1.3. Richness of plant species

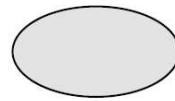
Count the number of plant species in the wetland that cover at least 10 ft².

Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

If you counted:	> 19 species	points = 2
	5 - 19 species	points = 1
	< 5 species	points = 0

H 1.4. Interspersion of habitats

Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



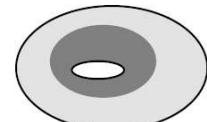
None = 0 points



Low = 1 point

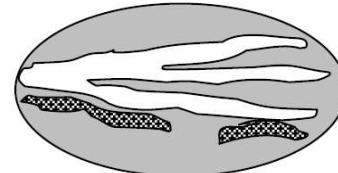
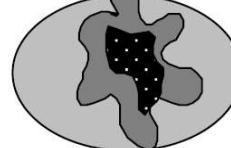
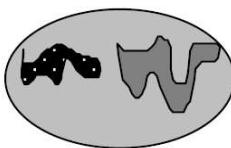


Moderate = 2 points



1

All three diagrams in this row are
HIGH = 3 points



H 1.5. Special habitat features:

Check the habitat features that are present in the wetland. *The number of checks is the number of points.*

- Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long)
- Standing snags (dbh > 4 in) within the wetland
- Undercut banks are present for at least 6.6 ft (2 m) **and/or** overhanging plants extends at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m)
- Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (*cut shrubs or trees that have not yet weathered where wood is exposed*)
- At least 1/4 ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (*structures for egg-laying by amphibians*)
- Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata)

2

Total for H 1

Add the points in the boxes above

7

Rating of Site Potential If Score is: 15 - 18 = H 7 - 14 = M 0 - 6 = L Record the rating on the first page

H 2.0. Does the landscape have the potential to support the habitat function of the site?

H 2.1 Accessible habitat (include *only habitat that directly abuts wetland unit*).

Calculate:

$$5.5\% \text{ undisturbed habitat} + (\quad 7.2\% \text{ moderate \& low intensity land uses / 2}) = 9.1\%$$

If total accessible habitat is:

- > 1/3 (33.3%) of 1 km Polygon
- 20 - 33% of 1 km Polygon
- 10 - 19% of 1 km Polygon
- < 10 % of 1 km Polygon

- points = 3
- points = 2
- points = 1
- points = 0

0

H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.

Calculate:

$$44.3\% \text{ undisturbed habitat} + (\quad 28.9\% \text{ moderate \& low intensity land uses / 2}) = 58.75\%$$

Undisturbed habitat > 50% of Polygon

points = 3

Undisturbed habitat 10 - 50% and in 1-3 patches

points = 2

Undisturbed habitat 10 - 50% and > 3 patches

points = 1

Undisturbed habitat < 10% of 1 km Polygon

points = 0

3

H 2.3 Land use intensity in 1 km Polygon: If

> 50% of 1 km Polygon is high intensity land use

points = (-2)

0

≤ 50% of 1km Polygon is high intensity

points = 0

Total for H 2

Add the points in the boxes above

3

Rating of Landscape Potential If Score is: 4 - 6 = H 1 - 3 = M < 1 = L Record the rating on the first page

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

H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? *Choose only the highest score that applies to the wetland being rated.*

Site meets ANY of the following criteria:

points = 2

- It has 3 or more priority habitats within 100 m (see next page)
- It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)
- It is mapped as a location for an individual WDFW priority species
- It is a Wetland of High Conservation Value as determined by the Department of Natural Resources
- It has been categorized as an important habitat site in a local or regional comprehensive plan, in a Shoreline Master Plan, or in a watershed plan

2

Site has 1 or 2 priority habitats (listed on next page) with in 100m

points = 1

Site does not meet any of the criteria above

points = 0

Rating of Value If Score is: 2 = H 1 = M 0 = L

Record the rating on the first page

WDFW Priority Habitats

Priority habitats listed by WDFW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp.

<http://wdfw.wa.gov/publications/00165/wdfw00165.pdf> or access the list from here:

<http://wdfw.wa.gov/conservation/phs/list/>

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

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

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

RATING SUMMARY – Western Washington

Name of wetland (or ID #): Parcel 092606-9003

Date of site visit: 10/3/2023

Rated by Altmann

Trained by Ecology? Yes No

Date of training 03/08 & 03/15

HGM Class used for rating Riverine & Fresh Water Tidal

Wetland has multiple HGM classes? Yes No

NOTE: Form is not complete with out the figures requested (figures can be combined).

Source of base aerial photo/map King County iMap

OVERALL WETLAND CATEGORY II (based on functions or special characteristics)

1. Category of wetland based on FUNCTIONS

Category I - Total score = 23 - 27

X Category II - Total score = 20 - 22

Category III - Total score = 16 - 19

Category IV - Total score = 9 - 15

Score for each function based on three ratings
(order of ratings is not important)

9 = H, H, H

8 = H, H, M

7 = H, H, L

7 = H, M, M

6 = H, M, L

6 = M, M, M

5 = H, L, L

5 = M, M, L

4 = M, L, L

3 = L, L, L

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>List appropriate rating (H, M, L)</i>				
Site Potential	M	M	M	
Landscape Potential	M	M	M	
Value	H	M	H	Total
Score Based on Ratings	7	6	7	20

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	Category
Estuarine	
Wetland of High Conservation Value	
Bog	
Mature Forest	
Old Growth Forest	
Coastal Lagoon	
Interdunal	
None of the above	<input checked="" type="checkbox"/>

R 1.0. Does the site have the potential to improve water quality?

R 1.1. Area of surface depressions within the Riverine wetland that can trap sediments during a flooding event:

Depressions cover $> \frac{3}{4}$ area of wetland	points = 8	2
Depressions cover $> \frac{1}{2}$ area of wetland	points = 4	
Depressions present but cover $< \frac{1}{2}$ area of wetland	points = 2	
No depressions present	points = 0	

R 1.2. Structure of plants in the wetland (areas with $>90\%$ cover at person height, **not** Cowardin classes)

Trees or shrubs $> \frac{2}{3}$ area of the wetland	points = 8	8
<input type="checkbox"/> Trees or shrubs $> \frac{1}{3}$ area of the wetland	points = 6	
<input type="checkbox"/> Herbaceous plants (> 6 in high) $> \frac{2}{3}$ area of the wetland	points = 6	
Herbaceous plants (> 6 in high) $> \frac{1}{3}$ area of the wetland	points = 3	
Trees, shrubs, and ungrazed herbaceous $< \frac{1}{3}$ area of the wetland	points = 0	

Total for R 1

Add the points in the boxes above

10

Rating of Site Potential If score is: 12 - 16 = H 6 - 11 = M 0 - 5 = L Record the rating on the first page

R 2.0. Does the landscape have the potential to support the water quality function of the site?

R 2.1. Is the wetland within an incorporated city or within its UGA?	Yes = 2 No = 0	0
R 2.2. Does the contributing basin to the wetland include a UGA or incorporated area?	Yes = 1 No = 0	0
R 2.3. Does at least 10% of the contributing basin contain tilled fields, pastures, or forests that have been clearcut within the last 5 years?	Yes = 1 No = 0	1
R 2.4. Is $> 10\%$ of the area within 150 ft of the wetland in land uses that generate pollutants?	Yes = 1 No = 0	1
R 2.5. Are there other sources of pollutants coming into the wetland that are not listed in questions R 2.1 - R 2.4?		0
Other Sources	Yes = 1 No = 0	
Total for R 2	Add the points in the boxes above	2

Rating of Landscape Potential If score is: 3 - 6 = H 1 or 2 = M 0 = L Record the rating on the first page

R 3.0. Is the water quality improvement provided by the site valuable to society?

R 3.1. Is the wetland along a stream or river that is on the 303(d) list or on a tributary that drains to one within 1 mi?	Yes = 1 No = 0	0
R 3.2. Is the wetland along a stream or river that has TMDL limits for nutrients, toxics, or pathogens?	Yes = 1 No = 0	0
R 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? (answer YES if there is a TMDL for the drainage in which the unit is found)	Yes = 2 No = 0	2
Total for R 3	Add the points in the boxes above	2

Rating of Value If score is: 2 - 4 = H 1 = M 0 = L Record the rating on the first page

R 4.0. Does the site have the potential to reduce flooding and erosion?

R 4.1. Characteristics of the overbank storage the wetland provides:

Estimate the average width of the wetland perpendicular to the direction of the flow and the width of the stream or river channel (distance between banks). Calculate the ratio: (average width of wetland)/(average width of stream between banks).

If the ratio is more than 20	points = 9	2
If the ratio is 10 - 20	points = 6	
If the ratio is 5 - < 10	points = 4	
If the ratio is 1 - < 5	points = 2	
If the ratio is < 1	points = 1	

R 4.2. Characteristics of plants that slow down water velocities during floods: *Treat large woody debris as forest or shrub. Choose the points appropriate for the best description (polygons need to have >90% cover at person height. These are NOT Cowardin classes).*

Forest or shrub for $> \frac{1}{3}$ area OR emergent plants $> \frac{2}{3}$ area	points = 7	7
Forest or shrub for $> \frac{1}{10}$ area OR emergent plants $> \frac{1}{3}$ area	points = 4	
Plants do not meet above criteria	points = 0	

Total for R 4	Add the points in the boxes above	9
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Rating of Site Potential If score is: 12 - 16 = H 6 - 11 = M 0 - 5 = L Record the rating on the first page

R 5.0. Does the landscape have the potential to support the hydrologic functions of the site?

R 5.1. Is the stream or river adjacent to the wetland downcut?	Yes = 0	No = 1	1
R 5.2. Does the up-gradient watershed include a UGA or incorporated area?	Yes = 1	No = 0	0
R 5.3 Is the up-gradient stream or river controlled by dams?	Yes = 0	No = 1	1
Total for R 5	Add the points in the boxes above		2

Rating of Landscape Potential If score is: 3 = H 1 or 2 = M 0 = L Record the rating on the first page

R 6.0. Are the hydrologic functions provided by the site valuable to society?

R 6.1. Distance to the nearest areas downstream that have flooding problems?

Choose the description that best fits the site.

The sub-basin immediately down-gradient of the wetland has flooding problems that result in damage to human or natural resources (e.g., houses or salmon redds)	points = 2	1
Surface flooding problems are in a sub-basin farther down-gradient	points = 1	
No flooding problems anywhere downstream	points = 0	

R 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan?	Yes = 2	No = 0	0
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Total for R 6	Add the points in the boxes above	1
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Rating of Value If score is: 2 - 4 = H 1 = M 0 = L Record the rating on the first page

H 1.1. Structure of plant community: *Indicators are Cowardin classes and strata within the Forested class*. Check the Cowardin plant classes in the wetland. *Up to 10 patches may be combined for each class to meet the threshold of 1/4 ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.*

<input type="checkbox"/> Aquatic bed <input type="checkbox"/> Emergent <input checked="" type="checkbox"/> Scrub-shrub (areas where shrubs have > 30% cover) <input checked="" type="checkbox"/> Forested (areas where trees have > 30% cover) <i>If the unit has a Forested class, check if:</i> <input checked="" type="checkbox"/> The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon	4 structures or more: points = 4 3 structures: points = 2 2 structures: points = 1 1 structure: points = 0	2
---	---	---

H 1.2. Hydroperiods

Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or 1/4 ac to count (see text for descriptions of hydroperiods).

<input type="checkbox"/> Permanently flooded or inundated <input type="checkbox"/> Seasonally flooded or inundated <input checked="" type="checkbox"/> Occasionally flooded or inundated <input type="checkbox"/> Saturated only <input type="checkbox"/> Permanently flowing stream or river in, or adjacent to, the wetland <input checked="" type="checkbox"/> Seasonally flowing stream in, or adjacent to, the wetland <input type="checkbox"/> Lake Fringe wetland <input type="checkbox"/> Freshwater tidal wetland	4 or more types present: points = 3 3 types present: points = 2 2 types present: points = 1 1 types present: points = 0	1
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H 1.3. Richness of plant species

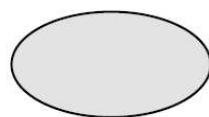
Count the number of plant species in the wetland that cover at least 10 ft².

Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

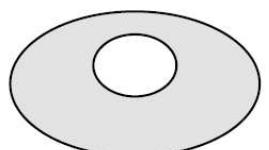
If you counted:	> 19 species	points = 2
	5 - 19 species	points = 1
	< 5 species	points = 0

H 1.4. Interspersion of habitats

Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



None = 0 points

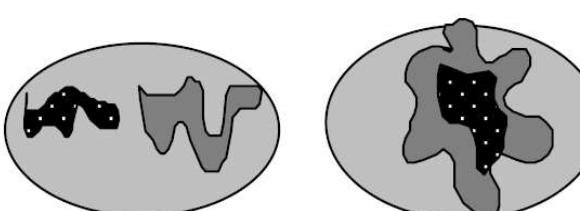
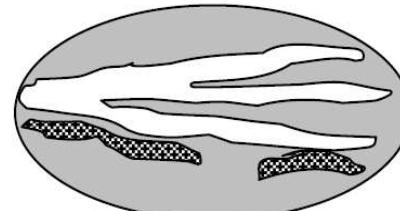


Low = 1 point



Moderate = 2 points

1



All three diagrams in this row are
HIGH = 3 points

- Standing snags (dbh > 4 in) within the wetland
- Undercut banks are present for at least 6.6 ft (2 m) **and/or** overhanging plants extends at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m)
- Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (*cut shrubs or trees that have not yet weathered where wood is exposed*)
- At least 1/4 ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (*structures for egg-laying by amphibians*)
- Invasive plants cover less than 25% of the wetland area in every stratum of plants (see *H 1.1 for list of strata*)

4

Total for H 1

Add the points in the boxes above

9

Rating of Site Potential If Score is: 15 - 18 = H 7 - 14 = M 0 - 6 = L Record the rating on the first page

H 2.0. Does the landscape have the potential to support the habitat function of the site?

H 2.1 Accessible habitat (include *only habitat that directly abuts wetland unit*).

Calculate:

$$5.5 \% \text{ undisturbed habitat} + (\underline{7.2 \% \text{ moderate \& low intensity land uses / 2}}) = 9.1\%$$

0

If total accessible habitat is:

- > $\frac{1}{3}$ (33.3%) of 1 km Polygon points = 3
- 20 - 33% of 1 km Polygon points = 2
- 10 - 19% of 1 km Polygon points = 1
- < 10 % of 1 km Polygon points = 0

H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.

Calculate:

$$44.3 \% \text{ undisturbed habitat} + (\underline{28.5 \% \text{ moderate \& low intensity land uses / 2}}) = 58.55\%$$

3

- Undisturbed habitat > 50% of Polygon points = 3
- Undisturbed habitat 10 - 50% and in 1-3 patches points = 2
- Undisturbed habitat 10 - 50% and > 3 patches points = 1
- Undisturbed habitat < 10 % of 1 km Polygon points = 0

H 2.3 Land use intensity in 1 km Polygon: If

- > 50% of 1 km Polygon is high intensity land use points = (-2)
- \leq 50% of 1km Polygon is high intensity points = 0

0

Total for H 2

Add the points in the boxes above

3

Rating of Landscape Potential If Score is: 4 - 6 = H 1 - 3 = M < 1 = L Record the rating on the first page

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

H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? Choose only the highest score that applies to the wetland being rated.

Site meets ANY of the following criteria:

points = 2

- It has 3 or more priority habitats within 100 m (see next page)
- It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)
- It is mapped as a location for an individual WDFW priority species
- It is a Wetland of High Conservation Value as determined by the Department of Natural Resources
- It has been categorized as an important habitat site in a local or regional comprehensive plan, in a Shoreline Master Plan, or in a watershed plan

2

Site has 1 or 2 priority habitats (listed on next page) with in 100m

points = 1

Site does not meet any of the criteria above

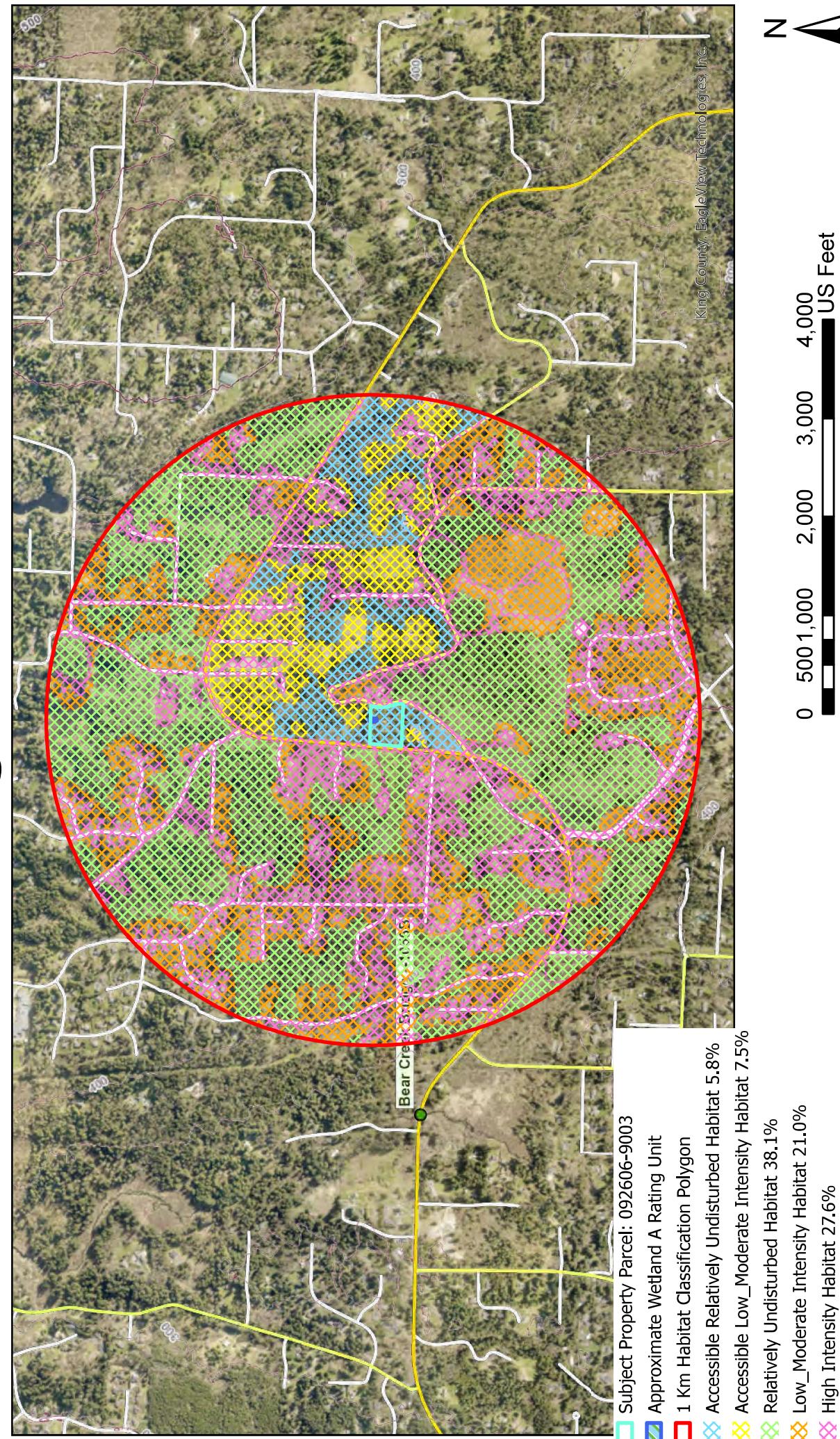
points = 0

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

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

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

Figure A





King County
Parcel 092606-9003

Figure B

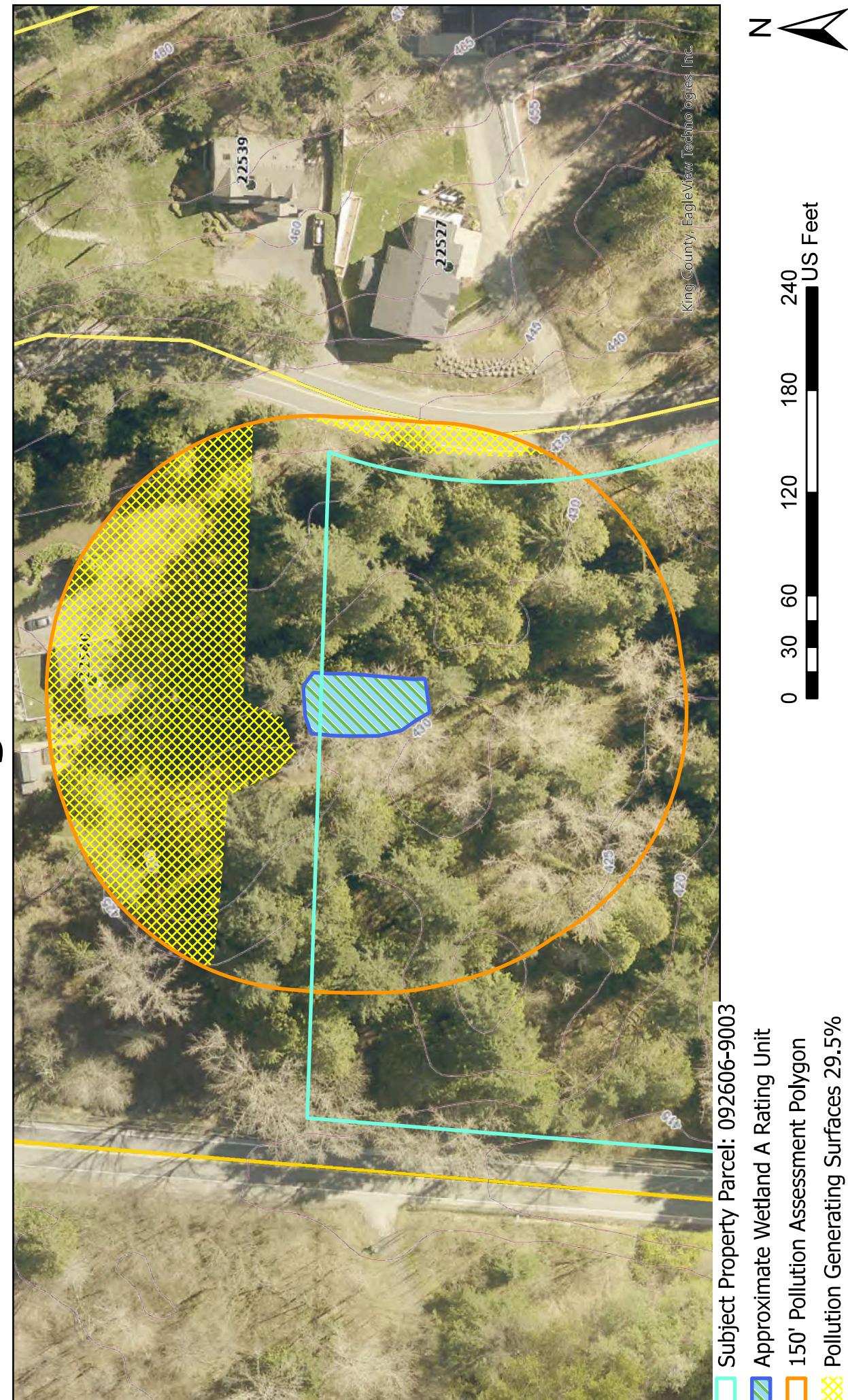
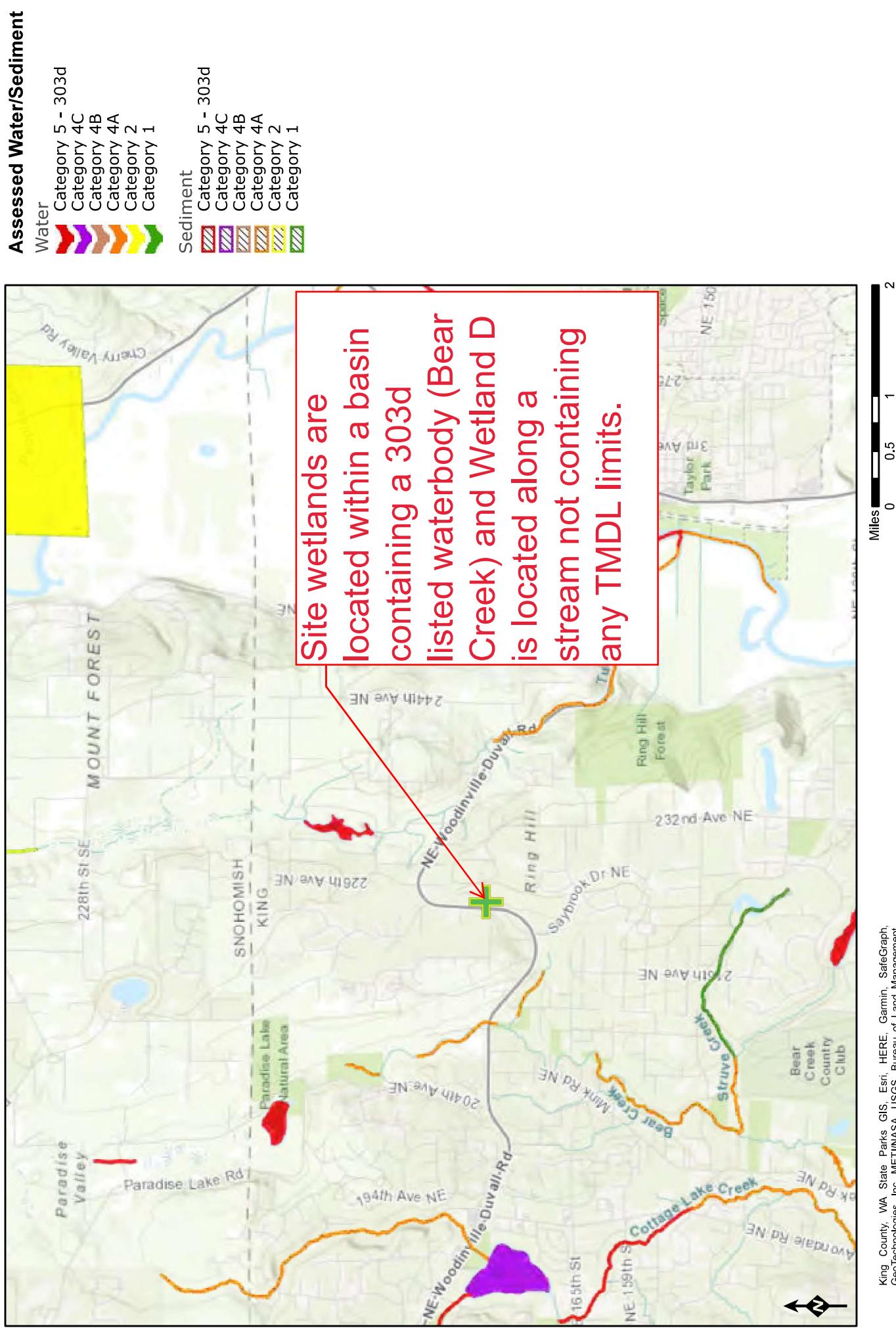


Figure C



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<http://www.ecy.wa.gov>

Publication Summary

Figure D

Our Ecology website has changed, which can cause broken links.
To report these, please [contact us](#) with the publication and broken link.

TITLE	Bear-Evans Watershed FC TMDL: WQ Improvement Report		
	Publication number	Date Published	Date Revised
	08-10-026	May 2008	July 2008
VIEW NOW	Bear-Evans Watershed FC TMDL: WQ Improvement Report (Number of pages: 113) (Publication Size: 5MB) <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> Trouble viewing? Try these free options. <ul style="list-style-type: none"> • Get the latest Adobe Reader for PDFs. • For Excel or Word viewing get Open Office, Microsoft OneDrive, DropBox Basic or a mobile app at your favorite app store. </div>		
AUTHOR(S)	Lee, Sinang		
DESCRIPTION	Bear Evans and Cottage Lake Creeks have too much fecal coliform bacteria. Fecal coliform bacteria is a common water quality problem in our state. Ecology will host a public meeting on May 27, 2008 at the Woodinville Water District (6:30-8:00pm) to share the recent studies and plans to improve bacteria pollution in the creeks. This draft report for improving bacteria pollution in the Bear-Evans Watershed is available for your review through June 9, 2008.		
REQUEST A COPY	The mission of the Department of Ecology is to protect, preserve, and enhance Washington's environment. To help us meet that goal, please consider the environment before you print or request a copy. ADA Accessibility The Department of Ecology is committed to providing people with disabilities access to information and services by meeting or exceeding the requirements of the Americans with Disabilities Act (ADA), Section 504 and 508 of the Rehabilitation Act, and Washington State Policy #188. Visit Ecology's website for more information. <ul style="list-style-type: none"> • Water Quality Order Form 		
CONTACT	Joan Nolan at 425-649-4425 or joan.nolan@ecy.wa.gov		
KEYWORDS	Cottage Lake, Bear-Evans Watershed, watershed, TMDL, fecal coliform		
RELATED PUBLICATIONS	Title: Bear-Evans Watershed Temperature, Dissolved Oxygen and Fecal Coliform Bacteria TMDL - Water Quality Implementation Plan Focus on Bear-Evans Watershed		

Site is located within a watershed containing an EPA approved WQ Improvement Project.

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Figure A

AOA-5438

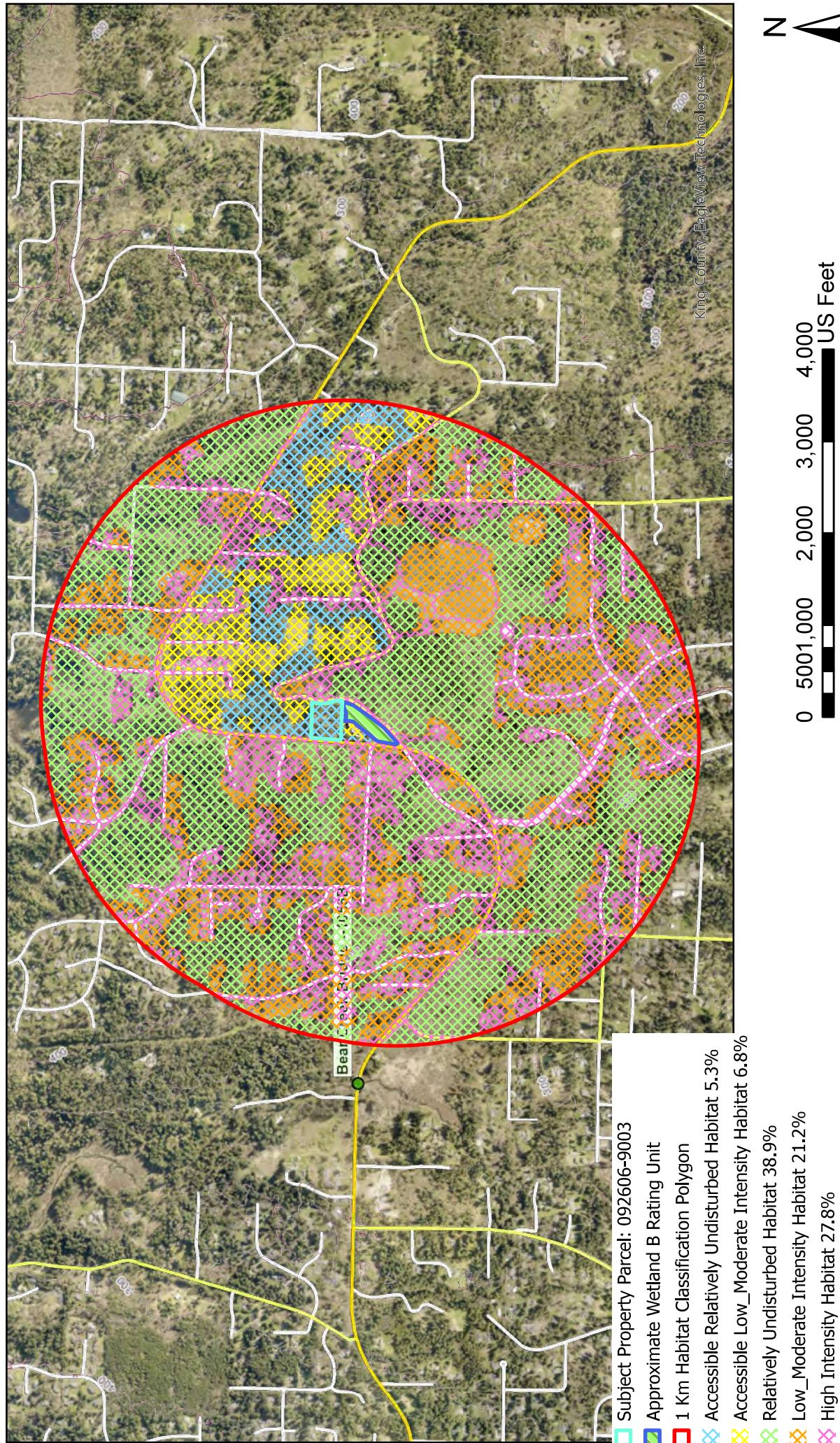
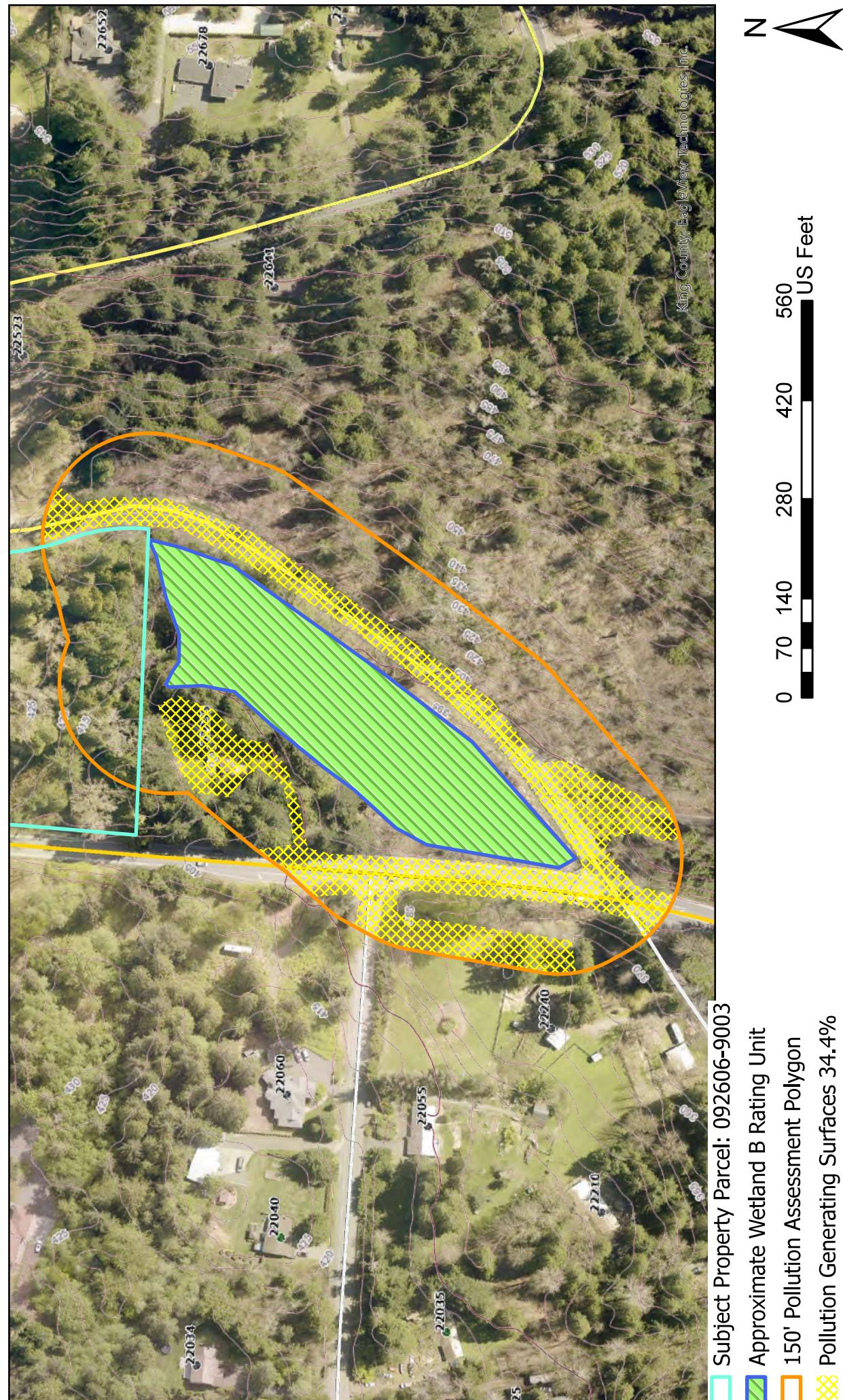




Figure B





Altmann Oliver Associates, LLC

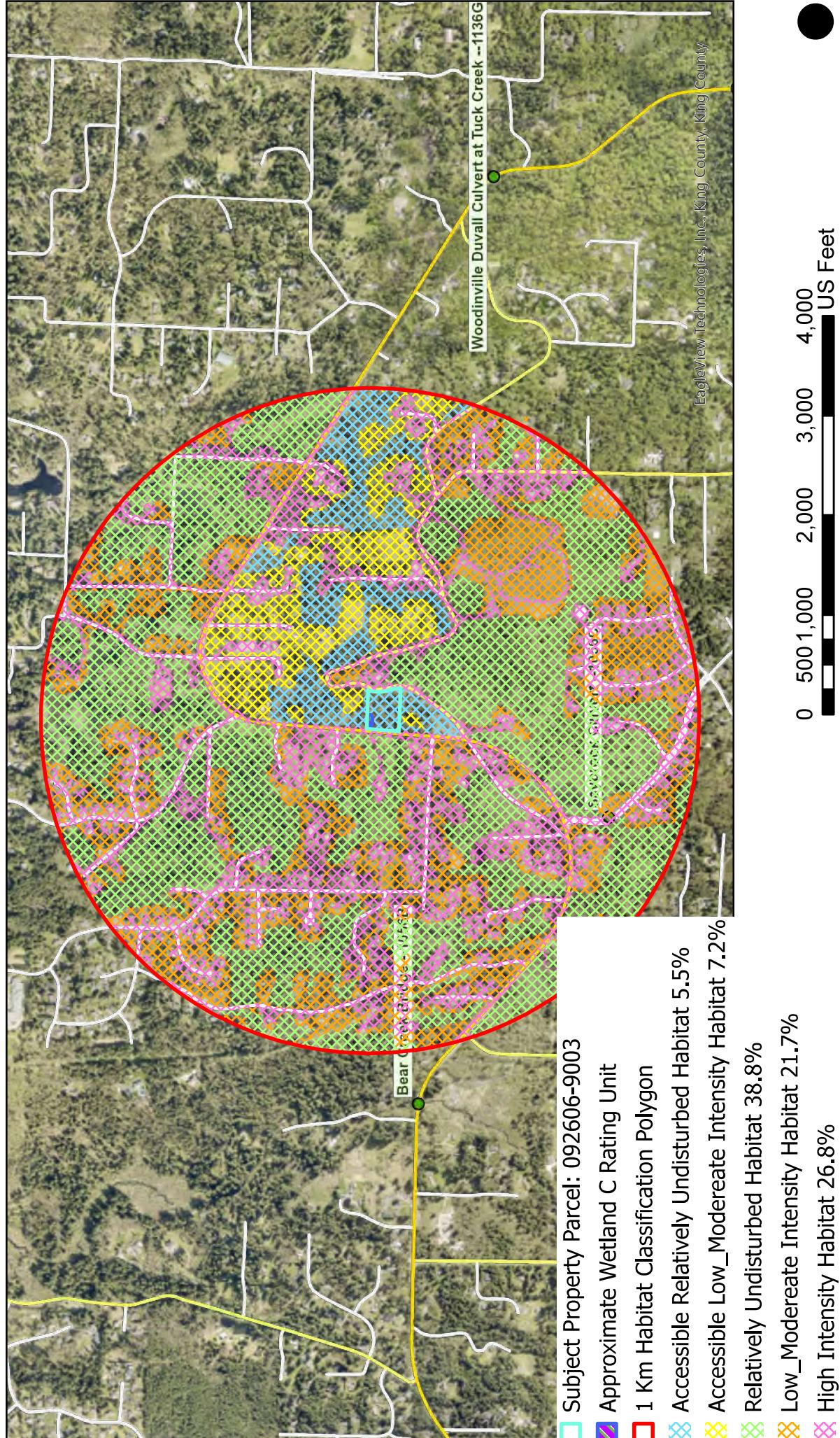
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Figure A

AOA-5438





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Figure B

AOA-5438

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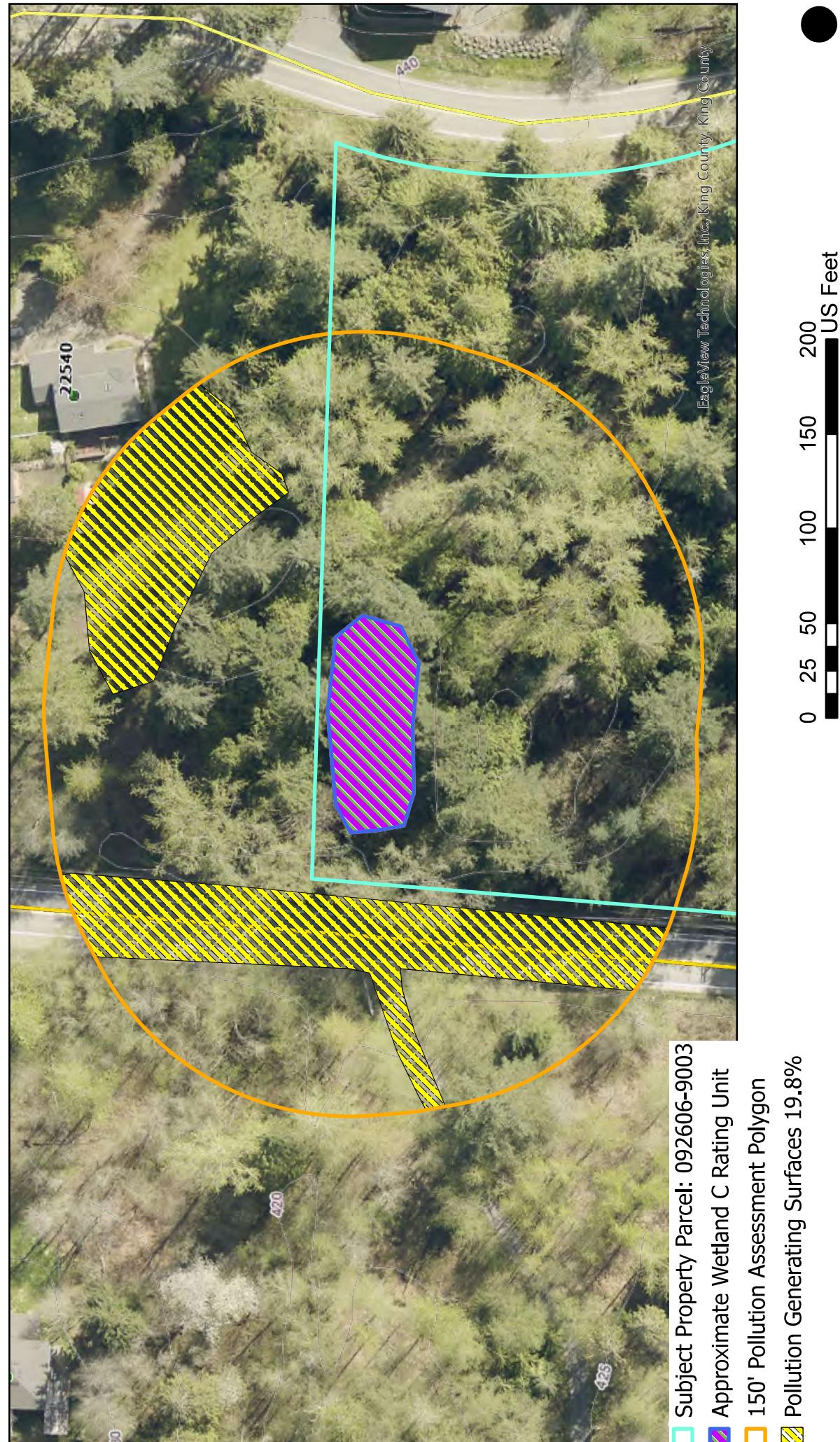
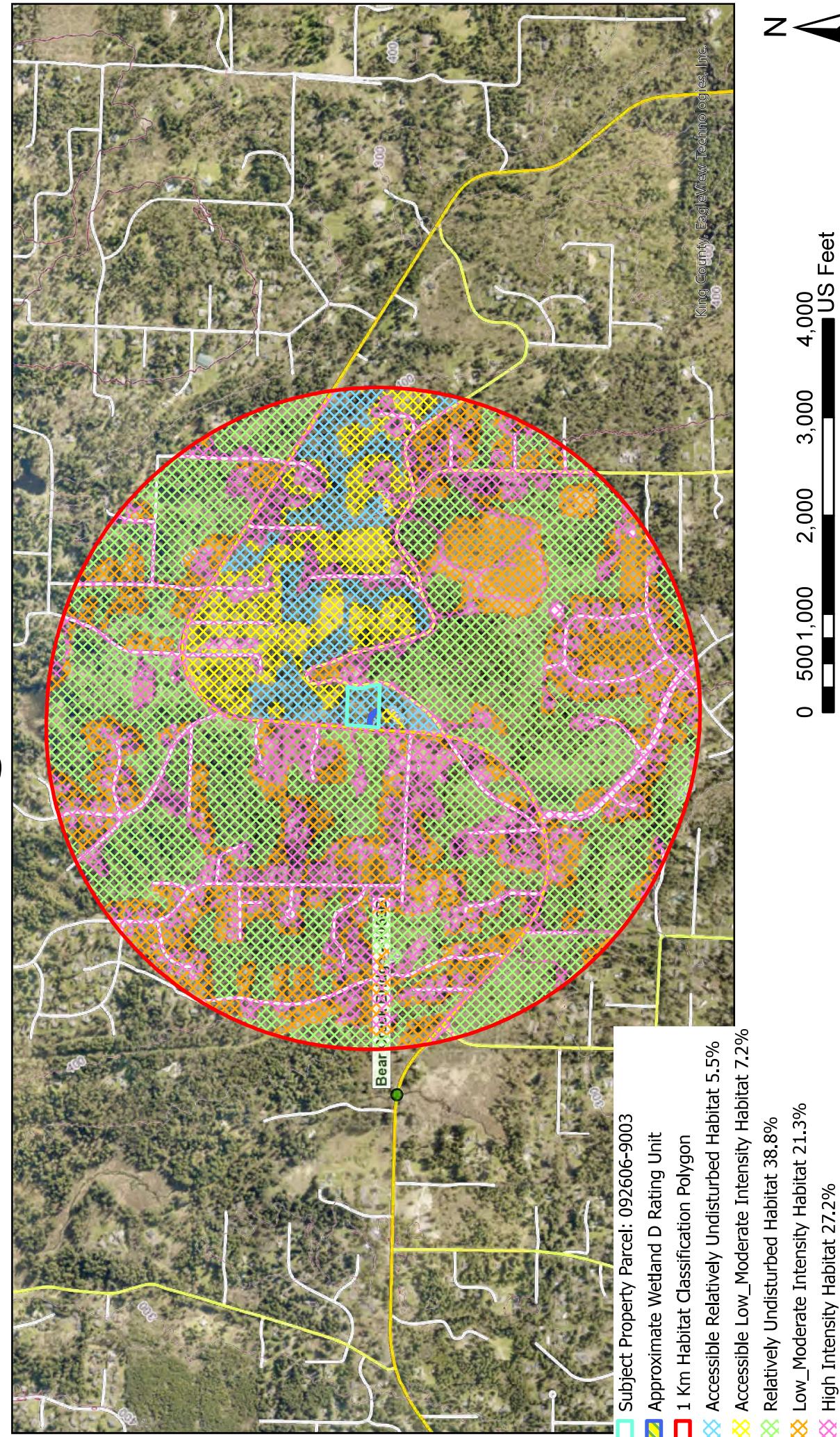


Figure A





AOA
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Environmental
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Figure B

AOA-5438

