



After Recording Return to:

City of Stevenson
7121 East Loop Road
PO Box 371
Stevenson, WA 98648
planning@ci.stevenson.wa.us
1 (509)427-5970

CONSERVATION EASEMENT

GRANTORS: Robert Paul Schade and Susan M Schade, a married couple (the "Grantor")

GRANTEE: CITY OF STEVENSON, a municipal corporation (the "Grantee")

Legal Description:

Abbreviated Form: A portion of the Shephard Donation Land Claim situated in the Southeast ¼ of the Southeast ¼ of Section 36, Township 3 North, Range 7 East, Willamette Meridian, in the county of Skamania, State of Washington

Additional on: Exhibit "A"

Assessor's Tax Parcel Nos: 03-07-36-4-4-0400-00

This Conservation Easement is made this 30 day of Nov, 2023 by Robert Paul Schade and Susan M Schade, a married couple having an address of 329 NW Hanksa (Wetlands), hereinafter referred to as "Grantor" in favor of the City of Stevenson, a municipal corporation and political subdivision of the State of Washington, having an address 7121 East Loop Road, PO Box 371, Stevenson, WA 98648, hereinafter referred to as "City" or "Grantee".

WITNESSETH:

WHEREAS, Grantor solely owns, subject to a deed of trust, certain real property in the City of Stevenson, Washington, more particularly described in Exhibit "A", attached hereto and incorporated by this reference.

WHEREAS, In satisfaction of condition 2 of the Critical Areas Permit decision by the City pertaining to the development of Grantor's property, the Grantor desires to preserve, in perpetuity, a portion of Grantor's property, more particularly as identified as the Wetlands and 40' Wetland Buffers, as represented by the map referenced in Exhibit "B", attached hereto and incorporated by this reference as the "Property"; and

NOW THEREFORE, in consideration of the mutual covenants, terms, conditions and restrictions contained herein, and in satisfaction of the City's Condition 2 of its Critical Area Permit review decision CAP 2023-04, Schade Habitat/Wetland Area 9-28-2023, Grantor hereby voluntarily grants and conveys to Grantee a conservation easement in perpetuity, over the Property identified in Exhibit "B", of the nature and character and to the extent hereinafter set forth as the "Conservation Easement". Grantor fully warrants title to said Property on the attached Exhibit "A" and as represented by the map referenced by the Exhibit "B" and will warrant and defend the same against the lawful claims of all persons whomsoever.

1. Purpose. The purpose of this Conservation Easement is to preserve and protect the functions and values of the wetland areas by assuring that the Property will be retained forever in a natural state and to prevent any use of the

Property that is otherwise inconsistent. Nothing in this easement shall encumber or affect any of Grantor's rights relating to any portion of Grantor's property that is not depicted within the Wetlands and 40' Wetland Buffers, as represented by the map referenced by the Exhibit "B".

2. Prohibited Uses. Any activity on or use of the Property inconsistent with the purpose of this Conservation Easement is prohibited. Without limiting the generality of the foregoing, the following activities and use are expressly prohibited:

(a) Construction or placing buildings, signs, billboards or other advertising, utilities or other structure on or above the ground. However, nothing in this easement shall prohibit Grantor from constructing buildings, structures, or other improvements, including construction of permanent demarcation and/or fencing installed along the outer edge of the Property in accordance with applicable city, state, and federal regulations.

(b) Dumping or placing as landfill any soil, material, or other substance. Dumping or placing of trash, waste or unsightly or offensive materials. Material typically associated with wetland enhancement activities, such as topsoil or soil amendments, placed or stored in accordance with applicable City Codes and requirements shall not be prohibited.

(c) Removing or destroying trees, shrubs or other vegetation unless done in conjunction with a Critical Areas Permit from the City of Stevenson or other approval by the Grantee.

(e) Introduction of nonnative plants and nonnative invasive species on the Property, or the planting or introduction of any species of vegetation on the Protected Property, except as deemed necessary by Grantee to preserve, protect or enhance the Purpose of this Conservation Easement.

(d) Activities which are detrimental to drainage, flood control, water conservation, erosion control, soil conservation or wetland functions.

(e) Division of the Property for residential development in the easement area.

3. Reserved Rights. Reserving unto Grantor, Grantor's successors and assigns, all rights accruing for its ownership of the Property, including the right to engage in or permit or invite others to engage in all uses of the Property that are not expressly prohibited herein and are not inconsistent with the purpose of this Conservation Easement.

4. Rights of Grantee. To accomplish the purposes stated herein, Grantor conveys the following rights to Grantee:

(a) To enter upon and inspect the Property in a reasonable manner and at reasonable times after at least forty-eight (48) hours advance written notice, to determine if Grantor or Grantor's successors and assigns are complying with the covenants and prohibitions contained in this Conservation easement.

(b) To proceed at law or in equity to enforce the provisions of this Conservation Easement and the covenants set forth herein, to prevent the occurrence of any of the prohibited activities set forth herein, and require the restoration of areas or features of the Property that may be damaged by any activity inconsistent with this Conservation Easement.

5. Grantee's Discretion. No delay or omission by the Grantee in the exercise of any right or remedy upon any breach by Grantor shall impair such right or remedy or be construed as a waiver. Grantee shall not be obligated to Grantor, or to any other person or entity, to enforce the provisions of this Conservation Easement.

6. Grantee's Liability. Grantor will assume all liability for any injury or damage to the person or property of third parties which may occur on the Property arising from Grantor's ownership of the Property. Neither Grantor, nor any person or entity claiming by or through Grantor, shall hold Grantee liable for any damage or injury to person or

personal property which may occur on the Property. This paragraph 6 shall not apply to the extent the subject damage or injury is caused by the negligence or willful misconduct of Grantee, its employees or agents.

7. Acts Beyond Grantor's Control. Nothing contained in this Conservation Easement shall be construed to entitle Grantee to bring any action against Grantor for any injury to or change in the Property resulting from natural causes beyond Grantor's control, including without limitation, fire, flood, storm, and earth movement, or from any necessary action taken by Grantor under emergency conditions to prevent, abate or mitigate significant injury to the Property or to persons resulting from such causes.

8. Recordation. Grantor shall record this Conservation Easement in timely fashion in the Records of Skamania County, Washington and shall be responsible for all recording costs and taxes necessary to record this Conservation Easement.

9. Successors. The covenants, terms, conditions, and restrictions of this Conservation Easement shall be binding upon, and inure to the benefit of, the parties hereto and their respective personal representatives, heirs, successor and assigns and shall continue as a servitude running in perpetuity with the Property.

10. Amendment. It is the intent of the parties that the restrictions provided by this Conservation Easement are no more stringent than those required by state and local laws. In the event any portion of Grantor's Property is later determined to not meet the criteria established by the City of Stevenson Critical Areas Code (SMC 18.13) or does not otherwise warrant the restrictions provided hereby, the parties or their successors may agree to amend or replace this Conservation Easement. This Conservation Easement may be amended only with the written consent of the Grantor and the Grantee, or their successors, and pursuant to any state or federal agency requirements.

Exhibits:

- A- Legal Description (1 page)
- B- Property 35' Riparian and Wetland Buffers (1 page)
- C- Critical Areas Report 8/25/2023 (33 pages)
- D- Buffer Demarcation Plan (Redlined) 9/20/2023, 9/28/2023) (2 pages)

IN WITNESS. WHEREOF, Grantor has executed this Conservation Easement on the day and year first above written.

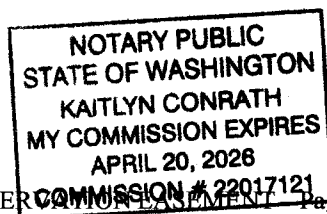
GRANTOR:

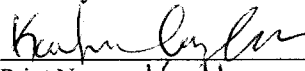

Robert Paul Schade

STATE OF WASHINGTON)
) ss:
COUNTY OF)

ON THIS DAY 11/30/2023, before me, personally appeared Robert Schade, known to me (or satisfactorily proven) to be the person(s) whose name(s) is/are subscribed to the within instrument, and acknowledged that he/she/they executed the same for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.




Print Name: Kaitlyn Conrath, Notary Public

GRANTOR::

Susan M Schade
Susan M Schade

STATE OF WASHINGTON)
) ss:
COUNTY OF)

ON THIS DAY 11/30/2023, before me, personally appeared Susan Schade, known to me (or satisfactorily proven) to be the person(s) whose name(s) is/are subscribed to the within instrument, and acknowledged that he/she/they executed the same for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Kaitlyn Conrath, Notary Public
Print Name: Kaitlyn Conrath

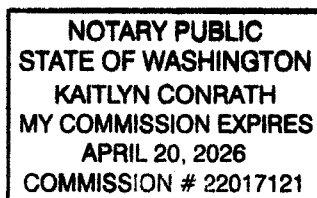


EXHIBIT A

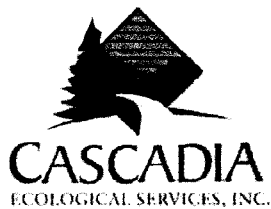
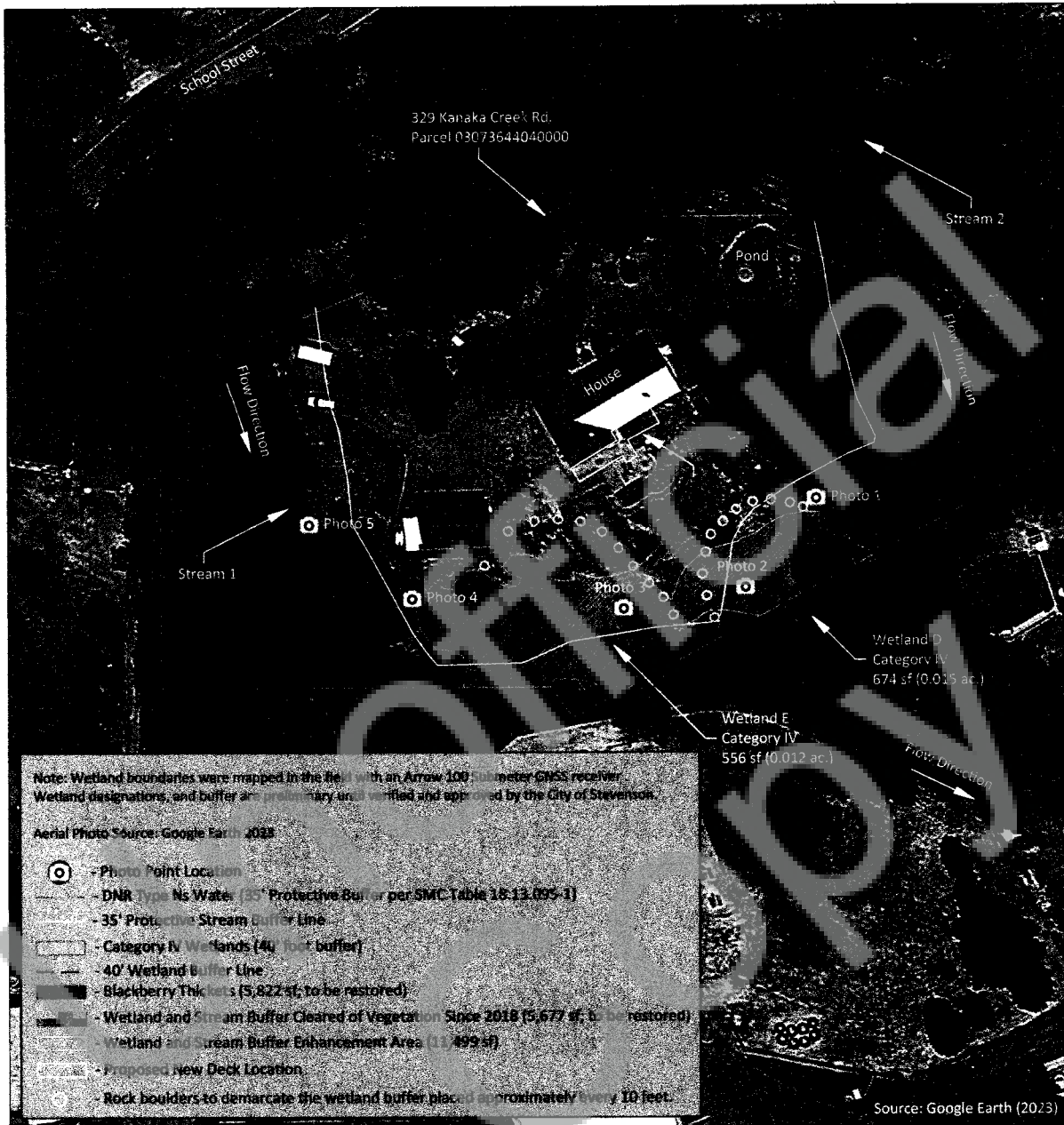
A portion of the Shepard Donation Land Claim, situated in the Southeast Quarter of the Southeast Quarter of Section 36, Township 3 North, Range 7 East of the Willamette Meridian, in the county of Skamania, State of Washington, described as follows:

Beginning at the 5/8" Rebar with Yellow Plastic Cap inscribed "OR #932 & WA #22098" marking a point which bears North 25° 55' 46" West, 440.00 feet from the Northwest corner of Lot 1, MELDAN ACRES, a Plat of Record in Book 'A', Page 84, Skamania County Plat Records; thence along the Northeasterly line of the School District #303 Tract of land, North 25° 55' 46" West, 21.35 feet to a 5/8" Rebar with Yellow Plastic Cap inscribed "OR #932 & WA #22098"; thence along the North line of the School District #303 Tract of Land, North 87° 32' 30" West, 229.58 feet to the West line of the Shepard Donation Land Claim; thence along said line, North 02° 25' 26" East, 197.04 feet to a 5/8" x 30" Rebar with Yellow Plastic Cap inscribed "KC Dev. LS 38028"; thence leaving said line, North 80° 03' 58" East, 150.15 feet to a 5/8" x 30" Rebar with Yellow Plastic Cap inscribed "KC Dev. LS 38028"; thence North 58° 42' 12" East, 139.38 feet to a 5/8" x 30" Rebar with Yellow Plastic Cap inscribed "KC Dev. LS 38028"; thence South 51° 11' 45" East, 10.00 feet to a 5/8" x 30" Rebar with Yellow Plastic Cap inscribed "KV Dev. LS 38028"; thence South 86° 03' 33" East, 45.04 feet to a 5/8" x 30" Rebar with Yellow Plastic Cap inscribed "KC Dev. LS 38082"; thence South 75° 45' 35" East, 120.94 feet to the 5/8" x 30" Rebar with Yellow Plastic Cap inscribed "KC Dev. LS 38028"; marking the Southwest corner of the Rivers Tract of Land as described in Deed, recorded in Auditor's File Number 2017000412, Skamania County Deed Records; thence along the South line thereof, South 64° 50' 28" East, 55.84 feet to a 5/8" x 30" Rebar with Yellow Plastic Cap inscribed "KC Dev. LS 38028"; thence leaving said line, South 17° 43' 28" East, 40.94 feet to a 5/8" x 30" Rebar with Yellow Plastic Cap inscribed "KC Dev. LS 38028"; thence South 25° 55' 31" East, 81.58 feet to the 5/8" x 30" Rebar with Yellow Plastic Cap inscribed "KC Dev. LS 38028" marking the Northeast corner of the Broughton Tract of Land as described in Deed, recorded in Book 59, Page 304, Skamania County Deed Records; thence along the North line of said Tract of Land, and continuing along the North line of the Krohn Tract of Land as described in Deed, recorded in Book 45, Page 469, said Records, South 63° 58' 49" West, 339.66 feet to the Point of Beginning.

Skamania County Assessor

Date 2/2/23 Parcel# 13073644040000

EXHIBIT B



Critical Areas, Cleared Buffer, and Mitigation Areas Critical Areas Technical Memorandum

Project: Schade Property
Parcel 03073644040000
Location: 329 NW Kanaka Creek Road, Stevenson, WA 98648
Legal: S36, T3N, R7E of the Willamette Meridian
45.6972 N. lat. / -121.8833 W long.
County: Skamania

Cascadia Ecological Services, Inc.
14205 NW 56th Avenue, Vancouver, WA 98685
(360) 601-8631
www.cascadia-inc.com

9/20/23

Client:
Bob and Susie Schade
329 NW Kanaka Creek Rd.
Stevenson, WA 98648
(858) 335-8586
bob.schade@oceanflight.com

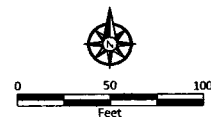


EXHIBIT C



TECHNICAL MEMORANDUM

TO: Ben Shumaker	FROM: Jim Barnes
COMPANY: City of Stevenson	DATE: 8/25/23
RE: 329 NW Kanaka Creek Rd., Stevenson, WA 98648	CC: Bob and Susie Schade

☐ URGENT ☒ FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY ☐ PLEASE RECYCLE

This technical memorandum addresses the results of a site visit I conducted to a property located at 329 NW Kanaka Creek Road in Stevenson, Washington on May 17, 2023. The purpose of the visit was to verify the current extent of wetlands and streams regulated under Chapter 18.13 (Critical Areas and Natural Resource Lands) of the City of Stevenson Municipal Code. A new deck is proposed along the south side of the existing house on the property. Prior to the city issuing a permit for the deck, it must be determined if it falls within any critical area buffers on the site.

Pacific Habitat Services, Inc. (PHS) completed a wetland delineation and preliminary wetland assessment for this property in 2013 for the previous property owner. Because this report is over five years old, the city requires an updated assessment. Since that time, the property has been split into four parcels, with the subject lot comprising 2.7 acres according to county records. Since the property has been split, only two of the wetlands in the report, D and E, are located on the Schade parcel.

Streams

Two DNR Type Ns (non-fish seasonal) streams are also present on the property. PHS lists stream 1 as an intermittent stream that flows onto the site from a culvert under School Street near the northwestern corner of the project site. On-site, the northernmost portion of the channel is very steep and has been lined with boulders to stabilize the channel and prevent erosion. The remaining portion of the channel is less steep, but it appears to have been straightened and channelized by excavation at some point in the past.

Stream 2 is located along the east side of the parcel within mature forest and shares similar characteristics as Stream 1. Per the findings of a 2021 geotechnical assessment report completed by Rapid Soil Solution (RSS), two (2) seasonal non-fish streams cut through the subject parcel along

the eastern and western boundary lines. Both of the streams are oriented north to south, flowing towards Kanaka Creek and Columbia River. The eastern stream ends on site and does not flow into any tributary.

In the professional opinion of RSS, the 35 feet setback is sufficient for both the western and eastern streams along their entire length of the subject site, instead of the 50-foot setback per SMC Table 18.13.095-1.

Wetlands

Due to the time that has passed since the PHS wetland delineation, the wetlands were mapped during the site visit with an Arrow 100 Submeter GNSS receiver to determine the current boundaries. Both wetlands are dominated by thickets of blackberries and provide generally low habitat functions with overall medium water quality and hydrologic functions.

CES completed current wetland ratings for the two wetlands. Both wetlands continue to rate as Category IV (Appendix B). Because the proposed land use intensity is low (one residential unit on 2.7 acres) and both wetlands have a habitat score of 5 points, the buffer is the lowest required per SMC Table 18.13.100-1 of 40 feet.

Cleared Wetland Buffer

Prior to purchase of the property, some clearing appears to have occurred in the stream and wetland buffers south of the house (Figure 6, purple polygon). The city is requiring restoration of this area because the clearing occurred without permits by the previous owner. CES compared aerial photos on Google Earth between 2018 and 2023 and determined that approximately 5,677 ft² of buffer was cleared. Four Oregon ash (*Fraxinus latifolia*) stumps are present in the cleared area. Armenian blackberries (*Rubus armeniacus*) are also present in the buffer and inside the boundaries of the wetlands (Figure 6, green polygon). The owner has expressed a desire to remove the blackberries and plant native shrubs and trees for habitat enhancement.

Blackberry Management

Armenian blackberries are a non-native and invasive plant. It usually grows in dense thickets which crowd out native vegetation wherever it gets established. The plant has a shallow root zone and produces arching canes that block sunlight from underlying plants, therefore, large areas of the plant can contribute to soil erosion. Because blackberry thickets are present throughout the south portion of the property in the wetland and stream buffers, it is recommended that they be removed and replaced with native woody shrubs and trees.

Manual removal of blackberry canes is the preferred method of control on this site rather than herbicide applications to limit damage to other existing native vegetation. Removal methods can include the use of machetes and mechanical brush cutters. Upon completion of the cutting of the blackberry canes in the spring prior to berry seed production, they should be removed from the site or mechanically mulched and spread on the ground surface within the immediate area.

In the fall months it may be necessary to revisit the areas where the blackberry canes were removed as resprout is likely to occur. Individual spot application in upland areas away from water sources to the resprouted canes with Garlon 3a (triclopyramine formulation) and Glyphosate is an effective treatment.

Upon completion of the removal activities, areas of exposed soils are likely to exist especially where larger blackberry thickets occurred. Overseed these areas with an upland native erosion control seed mix and overlay with 0.5 inches of sterile weed-free straw to help reduce erosion of disturbed soil.

Buffer Restoration

In order to restore the wetland and stream buffers and areas of blackberry removal, a mix of woody shrubs and trees will be planted. Replanting areas of removed blackberries and the buffer with native woody shrubs and trees will achieve (1) a "no net loss" of upland slope vegetated area and function, (2) advance plant communities in progression of ecological succession toward stable climax community structure, and (3) increase habitat value and level of ecological functions.

The wetland and stream buffer will be planted with the following list of plants.

Table 1. Plant specifications for the wetland and stream buffer mitigation area (11,499 ft²).

Common Name	Scientific Name	Plant Size	Required Number to be Planted
Oregon ash	<i>Fraxinus latifolia</i>	1-gallon container	10
Western red cedar	<i>Thuja plicata</i>	1-gallon container	10
Red-osier dogwood	<i>Cornus stolonifera</i>	1-gallon container	20
Nootka rose	<i>Rosa nutkana</i>	1-gallon container	20
Twinberry	<i>Lonicera involucrata</i>	1-gallon container	20
Vine maple	<i>Acer circinatum</i>	1-gallon container	20
Osoberry	<i>Oemleria cerasiformis</i>	1-gallon container	20

It is suggested that the buffer enhancement area be monitored by the property owner for 5 years to ensure that the installed plantings survive, and that control of invasive blackberries has been achieved. Each year, a complete count of mitigation plantings should occur and those that dies should be replaced during the dormant season (late November to early March). Supplemental irrigation to mitigation plantings may be required during the dry season to ensure plant survival.

Once the mitigation plantings have been established after the five-year monitoring period, the area should continue to be managed annually. Site management activities should include continued noxious weed control and may include mulching, fertilizing, and supplemental watering.

Proposed Deck

The property owner plans to apply for permits to construct a new deck along the south side of the house. Based on the results of this assessment, the deck is not within the limits of any critical areas or buffers on the property, therefore, it should not be subject to regulation by the city under the critical areas section of the municipal code.

Please feel free to contact me at (360) 601-8631 if you have any questions regarding my findings.

Attachments

Site Photos

Figure 1 – Location Map

Figure 2 – Site Topographic Contours

Figure 3 – Mapped Soils

Figure 4 – National Wetland Inventory Map

Figure 5 - Identified Critical Areas and Cleared Buffer

Appendix A - Rapid Soil Solution Field Assessment Report for Parcel #: 03073644040200

Appendix B – Wetland Rating Forms

Site Photos



Photo 1. South portion of the property adjacent to seasonal stream facing north towards house.



Photo 2. South portion of the property adjacent to seasonal stream facing northeast towards house.

Site Photos (cont.)



Photo 3. South portion of the property adjacent to seasonal stream facing east.



Photo 4. Area southwest of shop adjacent to stream 1 facing north.

Site Photos (cont.)



Photo 3. Stream 1 along the west side of the property.



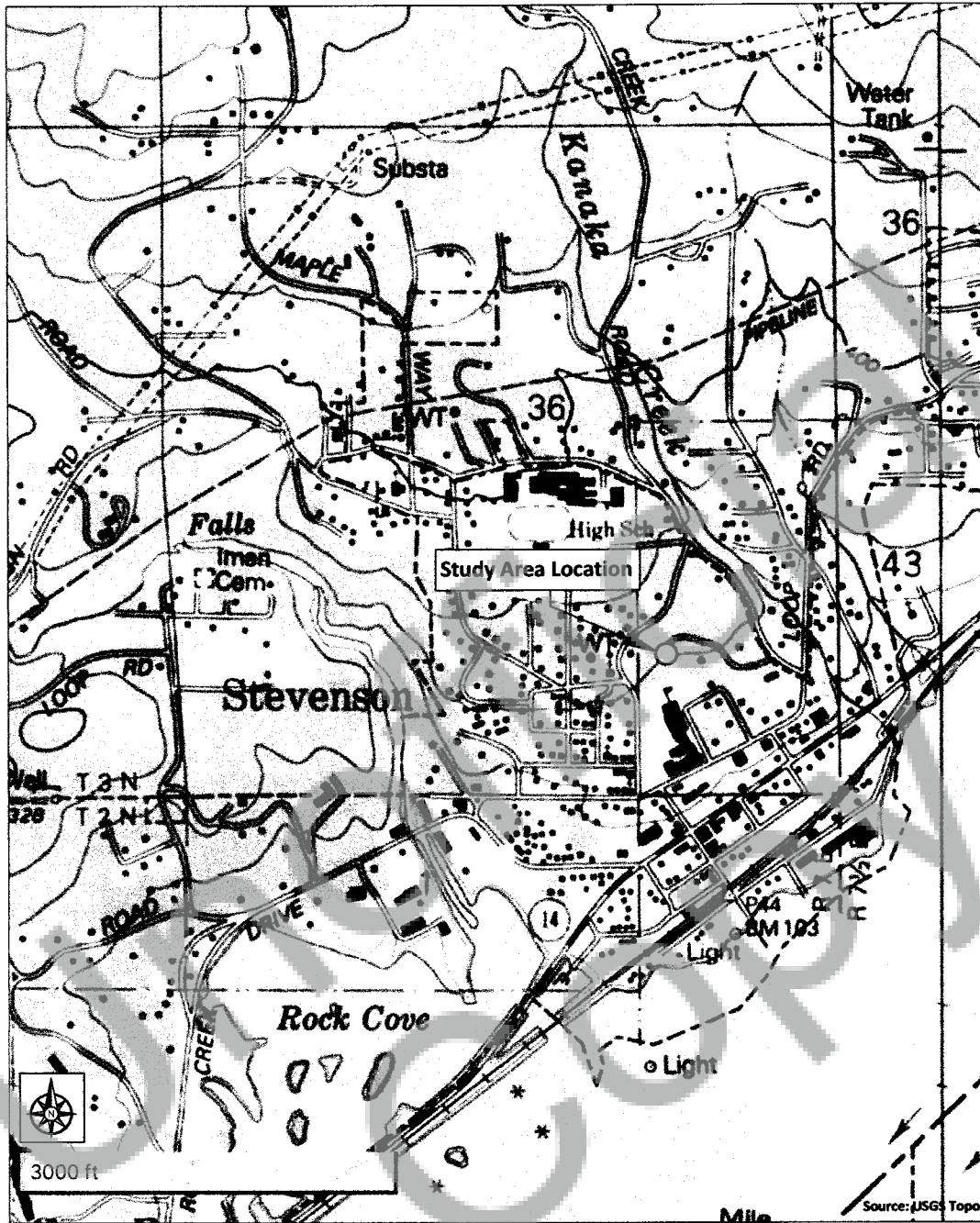
Figure 1 of 5 - Location Map
Critical Areas Technical Memorandum

Project: Schade Property
Parcel 03073644040000
Location: 329 NW Kanaka Creek Road, Stevenson, WA 98648
Legal: S36, T3N, R7E of the Willamette Meridian
45.6972 N. lat. / -121.8833 W long.
County: Skamania

Cascadia Ecological Services, Inc.
14205 NW 56th Avenue, Vancouver, WA 98685
(360) 601-8631
www.cascadia-inc.com

Date: 8/25/23

Client:
Bob and Susie Schade
329 NW Kanaka Creek Rd.
Stevenson, WA 98648
(858) 335-8586
bob.schade@oceanflight.com



**Figure 2 of 5 - Site Topographic Contours
Critical Areas Technical Memorandum**

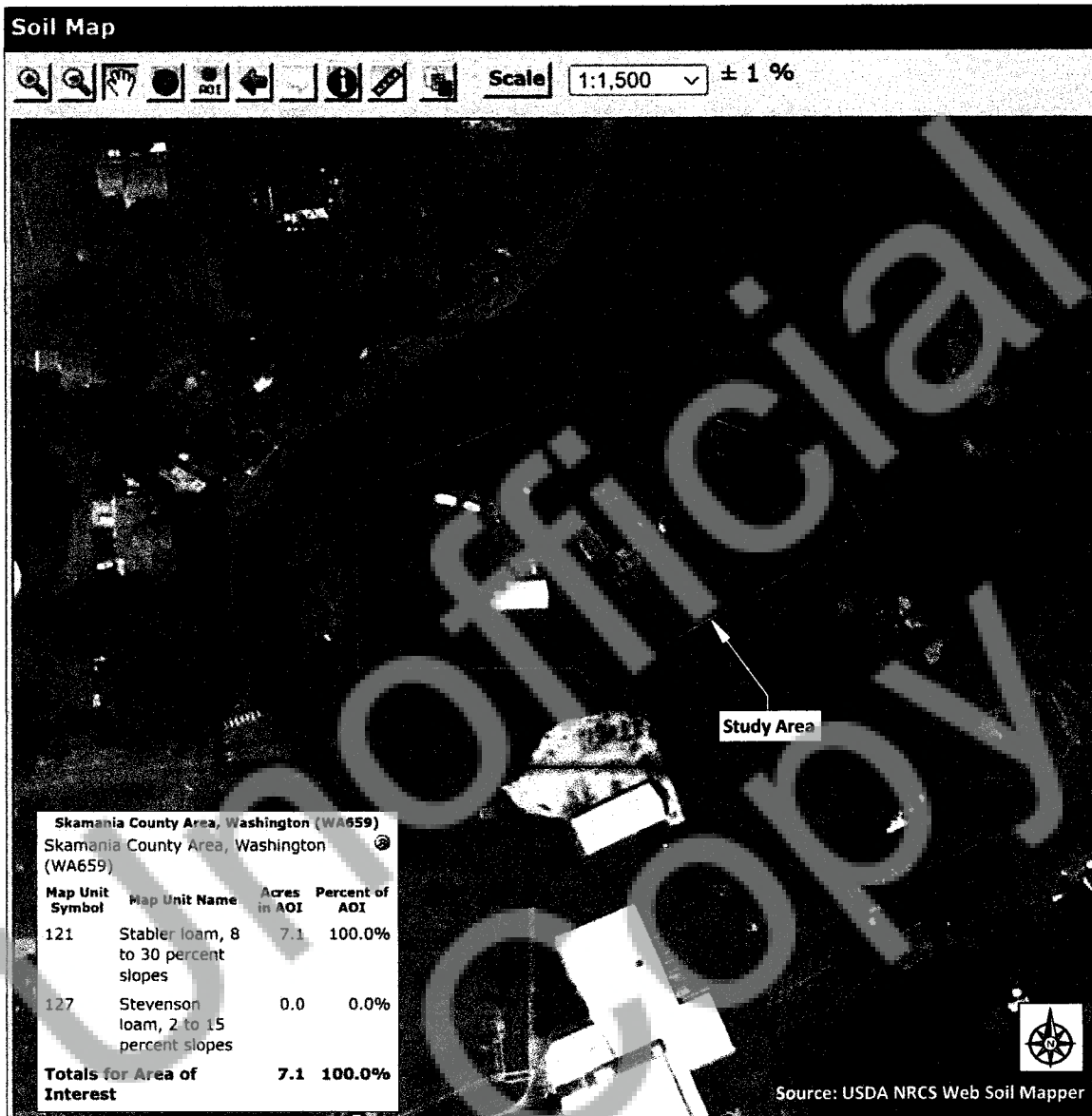
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 <p>CASCADIA ECOLOGICAL SERVICES, INC.</p>	<p>Figure 3 of 5 - Mapped Soils Critical Areas Technical Memorandum</p> <p>Project: Schade Property Parcel 03073644040000 Location: 329 NW Kanaka Creek Road, Stevenson, WA 98648 Legal: S36, T3N, R7E of the Willamette Meridian 45.6972 N. lat. / -121.8833 W long. County: Skamania</p>	<p>Client: Bob and Susie Schade 329 NW Kanaka Creek Rd. Stevenson, WA 98648 (858) 335-8586 bob.schade@oceanflight.com</p>
	<p>Cascadia Ecological Services, Inc. 14205 NW 56th Avenue, Vancouver, WA 98685 (509) 601-8631 www.cascadia-inc.com</p>	

Date: 8/25/22



 <p>CASCADIA ECOLOGICAL SERVICES, INC.</p>	<p>Figure 4 of 5 - National Wetland Inventory Map Critical Areas Technical Memorandum</p> <p>Project: Schade Property Parcel 03073644040000</p> <p>Location: 329 NW Kanaka Creek Road, Stevenson, WA 98648 Legal: S36, T3N, R7E of the Willamette Meridian 45.6972 N. lat. / -121.8833 W long. County: Skamania</p>	<p>Client: Bob and Susie Schade 329 NW Kanaka Creek Rd. Stevenson, WA 98648 (858) 335-8586 bob.schade@oceanflight.com</p>
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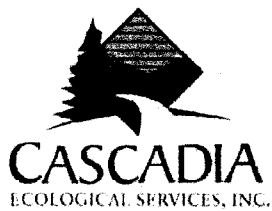
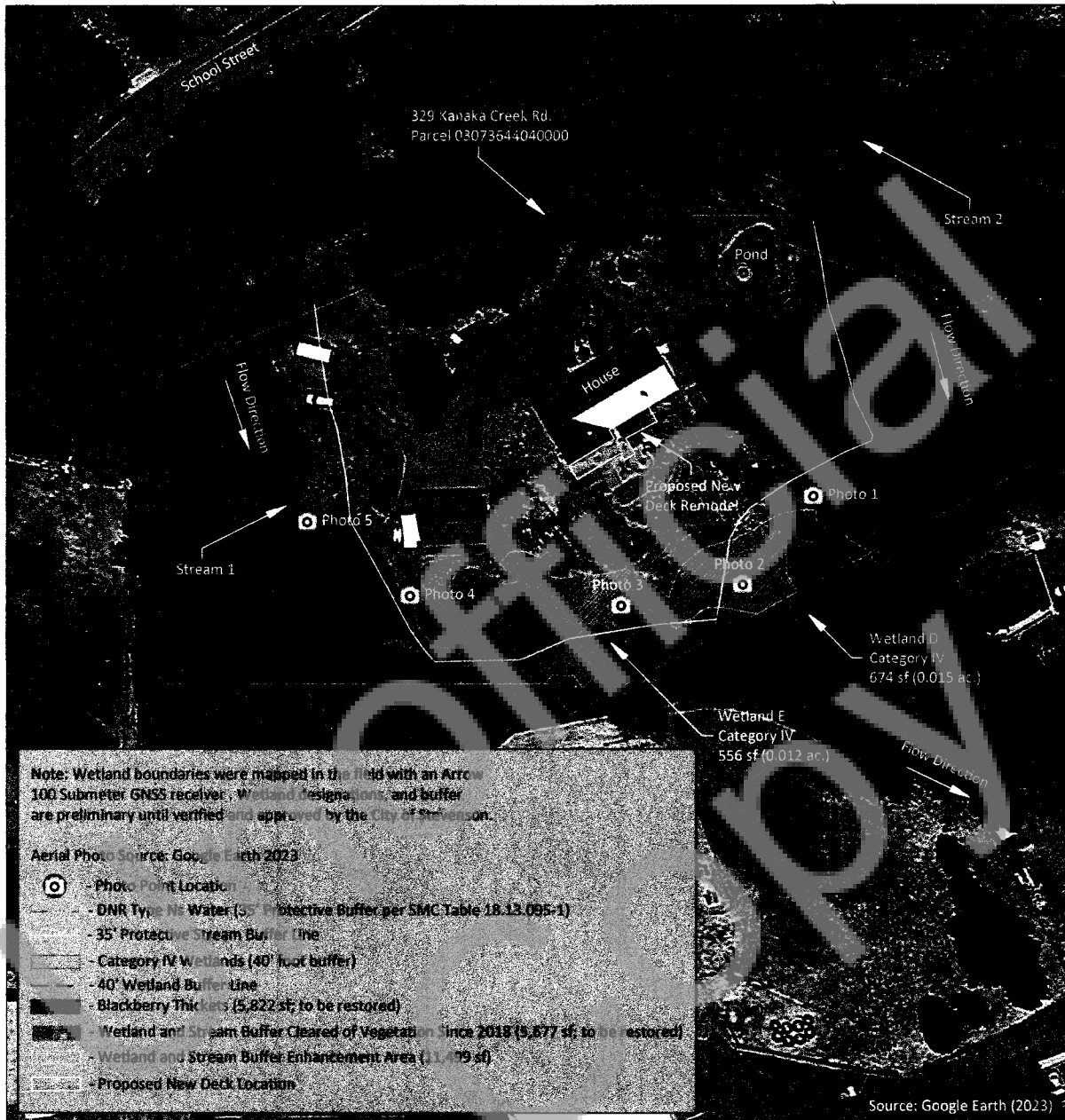


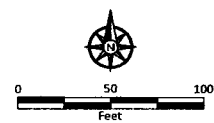
Figure 5 of 5 - Identified Critical Areas and Cleared Buffer Critical Areas Technical Memorandum

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Wetland name or number D

RATING SUMMARY – Western Washington

Name of wetland (or ID #): Wetland D Date of site visit: 5/24/23
Rated by Jim Barnes Trained by Ecology? ☒ Yes ☐ No Date of training 11/12/13
HGM Class used for rating Depressional Wetland has multiple HGM classes? ☐ Y ☒ X ☐ N

NOTE: Form is not complete without the figures requested (figures can be combined).
Source of base aerial photo/map Google Earth

OVERALL WETLAND CATEGORY IV (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			
Circle the appropriate ratings										
Site Potential	H	M	L	H	M	L	H	M	L	
Landscape Potential	H	M	L	H	M	L	H	M	L	
Value	H	M	L	H	M	L	H	M	L	
Score Based on Ratings	4			5			5			TOTAL
										14

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	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number D

HGM Classification of Wetlands in Western Washington

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

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

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

☒ NO - go to 2

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

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

NO - Saltwater Tidal Fringe (Estuarine)

YES - Freshwater Tidal Fringe

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

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

☒ NO - go to 3

YES - The wetland class is **Flats**

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

3. Does the entire wetland unit **meet all** of the following criteria?

- ☐ The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size;
☐ At least 30% of the open water area is deeper than 6.6 ft (2 m).

☒ NO - go to 4

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

4. Does the entire wetland unit **meet all** of the following criteria?

- ☒ The wetland is on a slope (*slope can be very gradual*),
☐ The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks,
☐ The water leaves the wetland **without being impounded**.

☒ NO - go to 5

YES - The wetland class is **Slope**

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

5. Does the entire wetland unit **meet all** of the following criteria?

- ☐ The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,
☐ The overbank flooding occurs at least once every 2 years.

Wetland name or number D

☒ NO - go to 6

☐ YES - The wetland class is **Riverine**

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

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

NO - go to 7

☒ YES - The wetland class is **Depressional**

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

NO - go to 8

☐ YES - The wetland class is **Depressional**

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

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

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

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

Wetland name or number D

DEPRESSIONAL 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 Wetland has an unconstricted, 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	2
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 > 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	3
D 1.4. Characteristics of seasonal ponding or inundation: <i>This is the area that is ponded for at least 2 months. See description in manual.</i> Area seasonally ponded is > 1/2 total area of wetland points = 4 Area seasonally ponded is > 1/4 total area of wetland points = 2 Area seasonally ponded is < 1/4 total area of wetland points = 0	0
Total for D 1	5

Rating of Site Potential If score is: 12-16 = H 6-11 = M X 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
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants?	Yes = 1 No = 0
D 2.3. Are there septic systems within 250 ft of the wetland?	Yes = 1 No = 0
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?	Yes = 1 No = 0
Source: _____	
Total for D 2	1

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





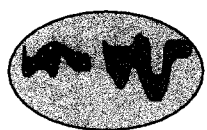


D 3.0. Is the water quality improvement provided by the site valuable to society?	
D 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list?	Yes = 1 No = 0
D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list?	Yes = 1 No = 0
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
Total for D 3	0

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

Wetland name or number D

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 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	4	
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 Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet points = 3 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	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. 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 Entire wetland is in the Flats class points = 5	3	
Total for D 4 Add the points in the boxes above		7
Rating of Site Potential If score is: <u>12-16</u> = H <u>6-11</u> = M <u>0-5</u> = L Record the rating on the first page		
D 5.0. Does the landscape have the potential to support hydrologic functions of the site?		
D 5.1. Does the wetland 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	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	0	
Total for D 5 Add the points in the boxes above		0
Rating of Landscape Potential If score is: <u>3</u> = H <u>1 or 2</u> = M <u>0</u> = 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. Choose the highest score if more than one condition is met. 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): • Flooding occurs in a sub-basin that is immediately down-gradient of unit. points = 2 • Surface flooding problems are in a sub-basin farther down-gradient. points = 1 Flooding from groundwater is an issue in the sub-basin. points = 1 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 There are no problems with flooding downstream of the wetland. points = 0	1	
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	
Total for D 6 Add the points in the boxes above		1
Rating of Value If score is: <u>2-4</u> = H <u>1</u> = M <u>0</u> = L Record the rating on the first page		

Wetland name or number D

<p>These questions apply to wetlands of all MGM classes.</p> <p>HABITAT FUNCTIONS - Indicators that site functions to provide important habitat</p>		
<p>H 1.0. Does the site have the potential to provide habitat?</p>		
<p>H 1.1. Structure of plant community: <i>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.</i></p> <p> <input type="checkbox"/> Aquatic bed 4 structures or more: points = 4 <input checked="" type="checkbox"/> Emergent 3 structures: points = 2 <input type="checkbox"/> Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1 <input type="checkbox"/> Forested (areas where trees have > 30% cover) 1 structure: points = 0 <i>If the unit has a Forested class, check if:</i> <input 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 </p>		0
<p>H 1.2. Hydroperiods</p> <p>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).</p> <p> <input type="checkbox"/> Permanently flooded or inundated 4 or more types present: points = 3 <input 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 type present: points = 0 <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 2 points <input type="checkbox"/> Freshwater tidal wetland 2 points </p>		1
<p>H 1.3. Richness of plant species</p> <p>Count the number of plant species in the wetland that cover at least 10 ft². <i>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</i> If you counted: > 19 species points = 2 5 - 19 species points = 1 < 5 species points = 0 </p>		0
<p>H 1.4. Interspersion of habitats</p> <p>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. <i>If you have four or more plant classes or three classes and open water, the rating is always high.</i></p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>None = 0 points</p> </div> <div style="text-align: center;">  <p>Low = 1 point</p> </div> <div style="text-align: center;">  <p>Moderate = 2 points</p> </div> <div style="text-align: center;">  </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div> <p style="margin-top: 10px;">All three diagrams in this row are HIGH = 3 points</p>		0

Wetland name or number D

H 1.5. Special habitat features: Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i> <input type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long). <input type="checkbox"/> Standing snags (dbh > 4 in) within the wetland <input type="checkbox"/> 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) <input type="checkbox"/> 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 (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>) <input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>) <input type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata)		0
Total for H 1	Add the points in the boxes above	2

Rating of Site Potential If score is: 15-18 = H 7-14 = M 2 0-6 = L *Record the rating on the first page*

H 2.0. Does the landscape have the potential to support the habitat functions of the site?		
H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit). Calculate: % undisturbed habitat $\frac{29}{100} + [(\% \text{ moderate and low intensity land uses})/2]$ <u>0</u> = <u>1</u> % 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 = <u>0</u>		0
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. Calculate: % undisturbed habitat $\frac{29}{100} + [(\% \text{ moderate and low intensity land uses})/2]$ <u>9</u> = <u>38</u> % Undisturbed habitat > 50% of Polygon points = 3 Undisturbed habitat 10-50% and in 1-3 patches points = <u>2</u> Undisturbed habitat 10-50% and > 3 patches points = 1 Undisturbed habitat < 10% of 1 km Polygon points = 0		2
H 2.3. Land use intensity in 1 km Polygon: If > 50% of 1 km Polygon is high intensity land use points = <u>(-2)</u> ≤ 50% of 1 km Polygon is high intensity points = 0		-2
Total for H 2	Add the points in the boxes above	0

Rating of Landscape Potential If score is: 4-6 = H 1-3 = M 2 < 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 <input type="checkbox"/> It has 3 or more priority habitats within 100 m (see next page) <input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists) <input type="checkbox"/> It is mapped as a location for an individual WDFW priority species <input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources <input type="checkbox"/> It has been categorized as an important habitat site in a local or regional comprehensive plan, in a Shoreline Master Plan, or in a watershed plan Site has 1 or 2 priority habitats (listed on next page) within 100 m points = <u>(1)</u> Site does not meet any of the criteria above points = 0		1

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

Record the rating on the first page

Wetland name or number D

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.

Wetland name or number D

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<p>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</p>	
<p>SC 1.0. Estuarine wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <ul style="list-style-type: none"> — The dominant water regime is tidal, — Vegetated, and — With a salinity greater than 0.5 ppt <p>Yes — Go to SC 1.1 (No) = Not an estuarine wetland</p>	
<p>SC 1.1. Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151?</p> <p>Yes = Category I No — Go to SC 1.2</p>	Cat. I
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less than 10% cover of non-native plant species. (If non-native species are <i>Spartina</i>, see page 25) — At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland. — The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. <p>Yes = Category I No = Category II</p>	Cat. I Cat. II
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value?</p> <p>Yes — Go to SC 2.2 No — Go to SC 2.3</p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?</p> <p>Yes = Category I (No) = Not a WHCV</p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland?</p> <p>http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf</p> <p>Yes — Contact WNHP/WDNR and go to SC 2.4 No = Not a WHCV</p> <p>SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website?</p> <p>Yes = Category I No = Not a WHCV</p>	Cat. I
<p>SC 3.0. Bogs</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i></p> <p>SC 3.1. Does an area within the wetland unit have organic soil horizons, either peats or mucks, that compose 16 in or more of the first 32 in of the soil profile?</p> <p>Yes — Go to SC 3.3 No — Go to SC 3.2</p> <p>SC 3.2. Does an area within the wetland unit have organic soils, either peats or mucks, that are less than 16 in deep over bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond?</p> <p>Yes — Go to SC 3.3 No = Is not a bog</p> <p>SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4?</p> <p>Yes = Is a Category I bog No — Go to SC 3.4</p> <p>NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that criterion by measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the plant species in Table 4 are present, the wetland is a bog.</p> <p>SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the species (or combination of species) listed in Table 4 provide more than 30% of the cover under the canopy?</p> <p>Yes = Is a Category I bog (No) = Is not a bog</p>	Cat. I

Wetland name or number D

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at least 200 years of age OR have a diameter at breast height (dbh) of 32 in (81 cm) or more. — Mature forests (west of the Cascade Crest): Stands where the largest trees are 80- 200 years old OR the species that make up the canopy have an average diameter (dbh) exceeding 21 in (53 cm). <p>Yes = Category I No = Not a forested wetland for this section</p>	<p>Cat. I</p>
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks — The lagoon in which the wetland is located contains ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p>Yes – Go to SC 5.1 No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). — At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. — The wetland is larger than 1/10 ac (4350 ft²) <p>Yes = Category I No = Category II</p>	<p>Cat. I</p> <p>Cat. II</p>
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p>Yes – Go to SC 6.1 No = not an interdunal wetland for rating</p> <p>SC 6.1. Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H,H,H or H,H,M for the three aspects of function)?</p> <p>Yes = Category I No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger?</p> <p>Yes = Category II No – Go to SC 6.3</p> <p>SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and 1 ac?</p> <p>Yes = Category III No = Category IV</p>	<p>Cat. I</p> <p>Cat. II</p> <p>Cat. III</p> <p>Cat. IV</p>
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	<p>2/2</p>

Wetland name or number E

RATING SUMMARY – Western Washington

Name of wetland (or ID #): Wetland E Date of site visit: 5/24/23
Rated by Jim Barnes Trained by Ecology? X Yes No Date of training 11/12/13
HGM Class used for rating Slope Wetland has multiple HGM classes? Y X N

NOTE: Form is not complete without the figures requested (figures can be combined).
Source of base aerial photo/map Google Earth

OVERALL WETLAND CATEGORY IV (based on functions X 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

FUNCTION	Improving Water Quality			Hydrologic			Habitat			
Circle the appropriate ratings										
Site Potential	H	M	L	H	M	L	H	M	L	
Landscape Potential	H	M	L	H	M	L	H	M	L	
Value	H	M	L	H	M	L	H	M	L	
Score Based on Ratings	3			4			5			TOTAL 12

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	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	N/A

Wetland name or number 1

HGM Classification of Wetlands in Western Washington

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

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

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

☒ NO - go to 2

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

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

NO - **Saltwater Tidal Fringe (Estuarine)**

YES - **Freshwater Tidal Fringe**

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

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

☒ NO - go to 3

YES - The wetland class is **Flats**

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

3. Does the entire wetland unit **meet all** of the following criteria?

- ☐ The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size;
☐ At least 30% of the open water area is deeper than 6.6 ft (2 m).

☒ NO - go to 4

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

4. Does the entire wetland unit **meet all** of the following criteria?

- ☒ The wetland is on a slope (*slope can be very gradual*).
☒ The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks,
☒ The water leaves the wetland **without being impounded**.

NO - go to 5

☒ YES - The wetland class is **Slope**

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

5. Does the entire wetland unit **meet all** of the following criteria?

- ☐ The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,
☐ The overbank flooding occurs at least once every 2 years.

Wetland name or number 1

NO – go to 6

YES – The wetland class is Riverine

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

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

NO – go to 7

YES – The wetland class is Depressional

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

NO – go to 8

YES – The wetland class is Depressional

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

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

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

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

Wetland name or number 1

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

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

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

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

S 3.0. Is the water quality improvement provided by the site valuable to society?		
S 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list?		
Yes = 1 No = 0		0
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? At least one aquatic resource in the basin is on the 303(d) list.		
Yes = 1 No = 0		0
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 unit is found.		
Yes = 2 No = 0		0
Total for S 3	Add the points in the boxes above	0

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




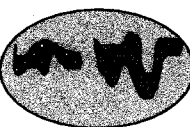


Wetland name or number 1

SLOPE WETLANDS	
Hydrologic Functions – Indicators that the site functions to reduce flooding and stream erosion	
S 4.0. Does the site have the potential to reduce flooding and stream erosion?	
S 4.1. Characteristics of plants that reduce the velocity of surface flows during storms: Choose the points appropriate for the description that best fits conditions in the wetland. <i>Stems of plants should be thick enough (usually > 1/8 in), or dense enough, to remain erect during surface flows.</i> Dense, uncut, rigid plants cover > 90% of the area of the wetland All other conditions	0 points = 1 points = 0
Rating of Site Potential If score is: <u>1</u> = M <u>X</u> 0 = L Record the rating on the first page	
S 5.0. Does the landscape have the potential to support the hydrologic functions of the site?	
S 5.1. Is more than 25% of the area within 150 ft upslope of wetland in land uses or cover that generate excess surface runoff?	Yes = 1 No = 0 0
Rating of Landscape Potential If score is: <u>1</u> = M <u>X</u> 0 = L Record the rating on the first page	
S 6.0. Are the hydrologic functions provided by the site valuable to society?	
S 6.1. Distance to the nearest areas downstream that have flooding problems: The sub-basin immediately down-gradient of site has flooding problems that result in damage to human or natural resources (e.g., houses or salmon redds) Surface flooding problems are in a sub-basin farther down-gradient No flooding problems anywhere downstream	points = 2 points = 1 points = 0 1
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: <u>2-4</u> = H <u>X</u> 1 = M <u>0</u> = L Record the rating on the first page	

NOTES and FIELD OBSERVATIONS:

S 6.1 - Answer based on County document "Wetland Rating Form Flooding Problems" 12/20/19.

Wetland name or number 1

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?	
<p>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.</p> <p> <input type="checkbox"/> Aquatic bed 4 structures or more: points = 4 <input checked="" type="checkbox"/> Emergent 3 structures: points = 2 <input checked="" type="checkbox"/> Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1 <input type="checkbox"/> Forested (areas where trees have > 30% cover) 1 structure: points = 0 If the unit has a Forested class, check if: <input 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 </p>	1
<p>H 1.2. Hydroperiods</p> <p>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).</p> <p> <input type="checkbox"/> Permanently flooded or inundated 4 or more types present: points = 3 <input 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 type 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 </p>	0
<p>H 1.3. Richness of plant species</p> <p>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</p> <p> If you counted: > 19 species points = 2 5 - 19 species points = 1 < 5 species points = 0 </p>	0
<p>H 1.4. Interspersion of habitats</p> <p>Decide from the diagrams below whether interspersions 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.</p> <div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>None = 0 points</p> </div> <div style="text-align: center;">  <p>Low = 1 point</p> </div> <div style="text-align: center;">  <p>Moderate = 2 points</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-end; margin-top: 10px;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div> <p>All three diagrams in this row are HIGH = 3 points</p>	0

Wetland name or number 1

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input type="checkbox"/> 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)</p> <p><input type="checkbox"/> 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 (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>	0
<p>Total for H 1</p> <p style="text-align: right;">Add the points in the boxes above</p>	1

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

H 2.0. Does the landscape have the potential to support the habitat functions of the site?	
<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: % undisturbed habitat <u>0</u> + [(% moderate and low intensity land uses)/2] <u>0</u> = <u>0</u> %</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = <u>0</u></p>	0
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: % undisturbed habitat <u>29</u> + [(% moderate and low intensity land uses)/2] <u>9</u> = <u>38</u> %</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = <u>2</u></p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	2
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = <u>2</u></p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>	-2
<p>Total for H 2</p> <p style="text-align: right;">Add the points in the boxes above</p>	0

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

H 3.0. Is the habitat provided by the site valuable to society?	
<p>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.</p> <p>Site meets ANY of the following criteria: points = 2</p> <p><input type="checkbox"/> It has 3 or more priority habitats within 100 m (see next page)</p> <p><input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p><input type="checkbox"/> It is mapped as a location for an individual WDFW priority species</p> <p><input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p><input type="checkbox"/> 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</p> <p>Site has 1 or 2 priority habitats (listed on next page) within 100 m points = <u>1</u></p> <p>Site does not meet any of the criteria above points = 0</p>	1

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

Wetland name or number 1

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.

Wetland name or number 1

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
Check all criteria that apply to the wetland. Circle the category when the appropriate criteria are met.	
SC 1.0. Estuarine wetlands Does the wetland meet the following criteria for Estuarine wetlands? — The dominant water regime is tidal, — Vegetated, and — With a salinity greater than 0.5 ppt <div style="text-align: right;">Yes—Go to SC 1.1 No= Not an estuarine wetland</div>	
SC 1.1. Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151? <div style="text-align: right;">Yes = Category I No - Go to SC 1.2</div>	Cat. I
SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? — The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less than 10% cover of non-native plant species. (If non-native species are <i>Spartina</i> , see page 25) — At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland. — The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. <div style="text-align: right;">Yes = Category I No = Category II</div>	Cat. I Cat. II
SC 2.0. Wetlands of High Conservation Value (WHCV) SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? <div style="text-align: right;">Yes – Go to SC 2.2 No – Go to SC 2.3</div> SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? <div style="text-align: right;">Yes = Category I No= Not a WHCV</div> SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf <div style="text-align: right;">Yes – Contact WNHP/WDNR and go to SC 2.4 No = Not a WHCV</div> SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? <div style="text-align: right;">Yes = Category I No = Not a WHCV</div>	Cat. I
SC 3.0. Bogs Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i> SC 3.1. Does an area within the wetland unit have organic soil horizons, either peats or mucks, that compose 16 in or more of the first 32 in of the soil profile? <div style="text-align: right;">Yes – Go to SC 3.3 No – Go to SC 3.2</div> SC 3.2. Does an area within the wetland unit have organic soils, either peats or mucks, that are less than 16 in deep over bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? <div style="text-align: right;">Yes – Go to SC 3.3 No = Is not a bog</div> SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? <div style="text-align: right;">Yes = Is a Category I bog No – Go to SC 3.4</div> <p>NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that criterion by measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the plant species in Table 4 are present, the wetland is a bog.</p> SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the species (or combination of species) listed in Table 4 provide more than 30% of the cover under the canopy? <div style="text-align: right;">Yes = Is a Category I bog No= Is not a bog</div>	Cat. I

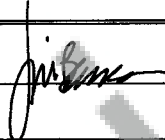
Wetland name or number 1

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at least 200 years of age OR have a diameter at breast height (dbh) of 32 in (81 cm) or more. — Mature forests (west of the Cascade Crest): Stands where the largest trees are 80- 200 years old OR the species that make up the canopy have an average diameter (dbh) exceeding 21 in (53 cm). <p>Yes = Category I No = Not a forested wetland for this section</p>	<p>Cat. I</p>
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks — The lagoon in which the wetland is located contains ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p>Yes – Go to SC 5.1 No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). — At least ¼ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland. — The wetland is larger than 1/10 ac (4350 ft²) <p>Yes = Category I No = Category II</p>	<p>Cat. I</p> <p>Cat. II</p>
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p>Yes – Go to SC 6.1 No = not an interdunal wetland for rating</p> <p>SC 6.1. Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H,H,H or H,H,M for the three aspects of function)?</p> <p>Yes = Category I No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger?</p> <p>Yes = Category II No – Go to SC 6.3</p> <p>SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and 1 ac?</p> <p>Yes = Category III No = Category IV</p>	<p>Cat I</p> <p>Cat. II</p> <p>Cat. III</p> <p>Cat. IV</p>
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	<p>n/a</p>

EXHIBIT D



TECHNICAL MEMORANDUM

TO: Ben Shumaker	FROM: Jim Barnes 
COMPANY: City of Stevenson	DATE: 9/20/23
RE: 329 NW Kanaka Creek Rd., Stevenson, WA 98648	CC: Bob and Susie Schade

☐ URGENT ☒ FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY ☐ PLEASE RECYCLE

This technical memorandum addresses the demarcation of the 40-foot wetland buffer on the Schade Property located at 329 NW Kanaka Creek Road in Stevenson, Washington.

Section 18.13.057.C.1 of the Stevenson Municipal Code discusses permanent demarcation of critical areas. Specifically, a permanent and perpetual physical demarcation along the outer boundary of the buffer area shall be installed and thereafter maintained. Such demarcation may consist of logs, a tree or hedgerow, wood or wood like fencing, or other prominent physical marking approved by the administrator.

Mr. Schade has chosen to use rock boulders at a spacing of approximately every 10 feet along the outer perimeter of the 40-foot wetland buffer as shown on the attached graphic. This demarcation type will provide a prominent physical marking.

Please let me know if you have any questions or need further clarification.

Attachments

Critical Areas, Cleared Buffer, and Mitigation Areas



A compass rose with 'N' indicating North. Below it is a scale bar marked 0, 50, and 100, with the word 'Feet' centered underneath.