Washington State Department of Transportation

NEPA Categorical Exclusion Documentation Form

Federal Aid Project Number:	NEPA Start Date: 8/1/2019	Intent of Submittal: ☐ Preliminary ☒ Final ☐ Re-Evaluate
Agency: City of Port Townsend	Project Title: Discovery Road Bikeway and Sidewalks Project	
County: Jefferson		
Beginning terminus: **Rainier Street** Ending terminus: **Sheridan Street** Miles: **0.82**	Township(s): **30 N** Range(s): **1 W** Section(s): **9 & 10**	

Part 1 - Project Description (Attach Vicinity Map)

The project reconstructs the roadway and adds curbs, enhanced crosswalks, stormwater drainage and treatment, lighting, and intersection improvements. On the north side of Discovery Road, the project will provide sidewalk and curb ramps. The City received a Ped/Bike Grant from WSDOT and federal funds from Jefferson County to construct a two-way bikeway, sidewalk, curb ramps, pedestrian activated flashing beacons, drainage, and pavement marking improvements on the south side of Discovery Road to improve non-motorized safety. The TIB grant will allow for much needed roadway improvements such as minor roadway realignment to create a complete street project.

Part 2 – Categorical Exclusion & STIP

- Identify one CE from 23 CFR 771.117 (CE Guidebook - Appendix A) that fits the entire project: **Item (b)(23)(i)**
- Per 23 CFR Part 452(l) identify the subsequent project phase identified on the STIP? ☐ ROW ☒ Construction

The project will not require ROW acquisition.

- Attach a copy of the STIP page to the CE documentation form. **See Attached STIP Page.**

NEPA Approval Signatures

Local Agency Approving Authority	Date 12-17-21	Local Programs Environmental Engineer	Date
Regional Local Programs Engineer	Date	Federal Highway Administration	Date

Completed by (Print Official's Name): **Laura Parsons, P.E.**	Telephone (include area code): **360-379-4432**	E-mail address: **lparsons@cityofpt.us**

Part 3 - Permits, Approvals & Right of Way (ROW)

Yes	No	Permit or Approval
☒	☐	Corps of Engineers ☐ Sec. 10 ☒ Sec. 404
	☒	Nationwide Type **14 Linear Transportation**
	☐	Individual Permit No. _____
☒	☐	Coastal Zone Management Certification
☒	☐	Critical Areas Ordinance (CAO) Permit
☐	☒	Forest Practices Act Permit
☐	☒	Hydraulic Project Approval
☐	☒	Local Building or Site Development Permits
☐	☒	Local Clearing and Grading Permit
☒	☐	National Pollutant Discharge Elimination System (NPDES) Baseline General for Construction
☐	☒	Shoreline Permit
☐	☒	State Waste Discharge Permit
☐	☒	Water Rights Permit

Yes	No	Permit or Approval
☒	☐	Water Quality Certification – Section 401 Issued by WA Dept. of Ecology
☐	☒	Tribal Permit(s) (if any) _____
☐	☒	Other Permits (List) _____
☐	☒	Is permanent ROW acquisition needed? If yes, amount needed: _____ (acres/sq. ft.).
☐	☒	Is any temporary ROW needed?
☐	☒	Is relocation required?
☐	☒	Has ROW (property and/or property interests) been acquired <u>for this project</u> prior to the NEPA start date? If yes, documentation demonstrating compliance with 23 CFR 710.501 may be required.
☐	☒	Is a detour required? If yes, please attach detour information.

U.S. Coast Guard Permitting

a. Does the project propose any new or modify ***<u>any</u>*** existing bridges or culverts crossing a waterway? ☐ Yes ☒ No

b. If Yes, attach a copy of the jurisdictional determination email or letter from the U.S. Coast Guard.

Other Federal Agencies - Does the project involve any federal properties, approvals or funding from other/additional federal agencies? ☐ Yes ☒ No If Yes, please describe.

Part 4 - Environmental Considerations

Will the project involve work in or affect any of the following? Identify proposed mitigation. Attach additional pages or supplemental information if necessary.

1. Air Quality - Identify any anticipated air quality issues.

Is the project exempt from Air Quality conformity requirements? ☒ Yes ☐ No

a. If Yes, identify exemption – please refer to Appendix G in the CE Guidebook for a list of exemptions.

Air Quality – Bicycle and Pedestrian facilities

b. Is the project included in the Metropolitan Transportation Plan? ☐ Yes ☒ No

If Yes, date Metropolitan Transportation Plan was adopted _____

c. Is the project located in an Air Quality Non-Attainment Area or Maintenance Area for carbon monoxide, ozone or PM 10 or PM 2.5? ☐ Yes ☒ No

2. Critical and Sensitive Areas

a. Is this project within a sole source aquifer ☐ Yes ☒ No

If located within a sole source aquifer, is the project exempt from EPA approval?

If Yes, please list exemption: _____

If No, date of EPA approval: _____

b. Will this project impact Species/Habitat other than ESA listed species? ☐ Yes ☒ No Explain your answer.

The project will take place within the existing right-of-way and will require the removal of vegetation and habitat (wetland and buffer). The mitigation site for wetland and buffer impacts is located immediately adjacent to the right-of-way on a City-owned parcel.

c. Is this project within one mile of a Bald Eagle nesting territory, winter concentration area or communal roost?

☒ Yes ☐ No If Yes, the local agency must go to the US Fish & Website (http://www.fws.gov/pacific/eagle/) and work through the *Do I Need a Permit?* section.

d. Are wetlands present within the project area? ☒ Yes ☐ No If Yes, estimate the impact in acres: **0.3 ac**

Please see attached Wetland Report and Mitigation Plan.

3. Cultural Resources/Historic Structures – Identify any historic, archaeological or cultural resources present within the project's Area of Potential Effects.

Does the project fit into any of the exempt types of projects listed in Appendix J of the CE Guidebook?

☐ Yes ☒ No If Yes, note exemptions below.

If No: Date of DAHP concurrence: **December 6, 2021**

Date of Tribal consultation(s) (if applicable):

Adverse effects on cultural/historic resources? ☐ Yes ☒ No

If Yes, date of approved Section 106 MOA: _____

4. Floodplains and Floodways

a. Is the project located in a 100-year floodplain? ☐ Yes ☒ No

b. If Yes, is the project located within a 100-year floodway? ☐ Yes ☐ No

c. Will the project impact a 100-year floodplain? ☐ Yes ☒ No If Yes, describe impacts.

5. Hazardous and Problem Waste – Identify potential sources and type(s).

a. Does the project require excavation below the existing ground surface? ☒ Yes ☐ No

b. Will groundwater be encountered? ☐ Yes ☒ No

c. Will any properties be acquired as part of this project? ☐ Yes ☒ No

d. Is this site located in an undeveloped area (*i.e.* no buildings, parking, storage areas or agriculture?

☐ Yes ☒ No

e. Is the project located within a one-mile radius of a known Superfund Site? ☐ Yes ☒ No

f. Is this project located within a ½-mile radius of a site or sites listed on any of the following Department of Ecology databases? ☒ Yes ☐ No If Yes, check the appropriate boxes below.

☐ Voluntary Cleanup Program (VCP), State Cleanup Site (SCS), or Independent Cleanup Program (ICP)

☐ Underground Storage Tank (UST)

☐ Leaking Underground Storage Tank (LUST)

☒ Confirmed and Suspected Contaminated Sites List (CSCSL)

g. Has site reconnaissance (windshield survey) been performed? ☒ Yes ☐ No (Please identify any properties not identified in the Ecology or ERS database search as an attachment -- name, address and property use).

h. Based on the information above and project specific activities, is there a potential for the project to generate, acquire or encounter contaminated soils, groundwater or surface water? ☐ Yes ☒ No

Please explain:

If you responded **Yes** to any of these questions above (5A – 5F or 5H), contact your Region LPE for assistance as a "Right-Sized" HazMat Analysis Report/Memorandum most likely will be required.

See attached Hazardous Materials Technical Memorandum.

6. Noise

a. Does the project involve constructing a new roadway? ☐ Yes ☒ No

b. Is there a change in the vertical or horizontal alignment of the existing roadway? ☒ Yes ☐ No

c. Does the project increase the number of through traffic lanes on an existing roadway? ☐ Yes ☒ No

d. Is there a change in the topography? ☐ Yes ☒ No

e. Are there auxiliary lanes extending 1-½ miles or longer being constructed as part of this project? ☐ Yes ☒ No

f. If you answered Yes to any of the preceding questions, identify and describe any potential noise receptors within the project area and subsequent impacts to those noise receptors. Please attach a copy of the noise analysis if required.

The roadway centerline will be shifted approximately five feet northwesterly, still within the existing right-of-way, to accommodate the new bicycle and pedestrian facilities on the south side of Discovery Road. The roadway pavement width (for one travel lane in each direction) remains unchanged at ~22 feet. This changes the offset from center of the closest lane to the closest residential home by about 10 percent (from approximately 45 feet to approximately 40 feet). Landscape strips will be provided between the roadway and the bicycle/pedestrian lanes. As the project is intended to provide traffic calming and a reduction in vehicle speeds, noise generated by passing traffic would be reduced with the lower speeds. No noise impacts, other than from temporary construction, are anticipated.

If impacts are identified, describe proposed mitigation measures.

No impacts are identified; thus, no mitigation is required.

7. 4(f)/6(f) Resources: parks, recreation areas, wildlife refuges, historic properties, wild & scenic rivers, scenic byways

a. Please identify any 4(f) properties within the project limits and the areas of impacts.

The Salish Coast Elementary School is located near the east end of the project alignment. Although the school is not a designated park, it has recreational facilities that are available to the public. The project is intended to provide safer, more accessible access to the corridor, including access to the school. No direct or indirect impacts to this resource are anticipated.

b. Please identify any properties within the project limits that used funds from the Land & Water Conservation Fund Act.

None

c. Please list any Wild and Scenic Rivers and Scenic Byways within the project limits.

None

8. Agricultural Lands –

a. Are there agricultural lands within 300 feet of the project limits? ☐ Yes ☒ No If Yes, describe impacts:

b. Are impacted lands considered to be unique and prime farmland? ☐ Yes ☒ No
If Yes, date of project review by Natural Resource Conservation Service (NRCS): _____

9. Rivers, Streams (continuous or intermittent) or Tidal Waters

a. Identify all waterbodies within 300 feet of the project limits or that will otherwise be impacted.

None

b. Identify stream crossing structures by type.

None

10. Tribal Lands – Identify whether the project will occur within any Tribal lands, including reservation, trust and fee lands. Please do not list usual and accustomed area.

The project will not occur on Tribal lands.

11. Water Quality/Stormwater

a. Will this project's proposed stormwater treatment facility be consistent with the guidelines provided by either WSDOT's HRM, DOE's stormwater management manual for eastern/western Washington or a local agency equivalent manual? ☒ Yes ☐ No

If No, explain proposed water quality/quantity treatment for the new and any existing pollution generating impervious surface associated with the proposed project.

b. Amount of existing pollution generating impervious surface within the project limits: **~82,000 square feet**

c. Net new pollution generating impervious surface to be created as a result of this project: **0**

d. Amount of proposed post-project untreated pollution generating impervious surface: **0**

The Project is required to treat all new and replaced PGIS. The Western Washington Hydrology Model was used to determine the amount of treatment required for the new and replaced roadway area. Flow control is assumed to be exempt as it will be conveyed to the Kah Tai Lagoon and then discharged to Port Townsend Bay. A BioClean Modular Wetland is recommended for this Project capable of treating all stormwater within the project footprint.

12. Previous Environmental Commitments

Describe previous environmental commitments that may affect or be affected by the project – if any.

None

13. Environmental Justice - Does the project meet any of the exemptions noted in Appendix L of the CE Documentation Guidebook? **Yes.**

If Yes, please note the exemption and appropriate justification in the space below.

The project meets exemptions 1 (roadway reconstruction), 6 (turn lanes within existing rights of way), 7 (bike and ped facilities within existing rights of way), and 8 (utilities within existing rights of way).

If No, attach Appendix M and supporting documentation as required per the decision matrix. This will include at least two demographic information sources and possibly a description of anticipated project impacts.

See attached Environmental Justice Technical Memorandum.

Please refer to the CE Guidebook for more information.

Part 5 - Biological Assessments and EFH Evaluations

1. **Do any listed species potentially occur in the project's action area and/or is any designated critical habitat present within the project's action area?** ☐ Yes ☒ No Attach species listings.

Affected ESA Listed Species	2. Will any construction work occur within 0.25 mile of any of the following?	3. Does the project involve blasting, pile driving, concrete sawing, rock-drilling or rock-scaling activity within one mile of any of the following?
Oregon Spotted Frog proposed critical habitat or suitable habitat?	☐ Yes ☒ No	☐ Yes ☒ No
Yellow-billed Cuckoo suitable habitat?	☐ Yes ☒ No	☐ Yes ☒ No

Spotted Owl management areas, designated critical habitat or suitable habitat?	☐ Yes ☒ No	☐ Yes ☒ No
Marbled Murrelet nest or occupied stand, designated critical habitat or suitable habitat?	☐ Yes ☒ No	☐ Yes ☒ No
Western Snowy Plover designated critical habitat?	☐ Yes ☒ No	☐ Yes ☒ No
Is the project within 0.25 mile of marine waters? If Yes explain potential effects on Killer Whales and on Marbled Murrelet foraging areas.	☐ Yes ☒ No	☐ Yes ☒ No
Killer Whale designated critical habitat?	☐ Yes ☒ No	☐ Yes ☒ No
Grizzly Bear suitable habitat?	☐ Yes ☒ No	☐ Yes ☒ No
Gray Wolf suitable habitat?	☐ Yes ☒ No	☐ Yes ☒ No
Canada Lynx habitat?	☐ Yes ☒ No	☐ Yes ☒ No
Columbia White-tailed Deer suitable habitat?	☐ Yes ☒ No	☐ Yes ☒ No
Woodland Caribou habitat?	☐ Yes ☒ No	☐ Yes ☒ No
Streaked Horned Lark designated critical habitat or suitable habitat?	☐ Yes ☒ No	☐ Yes ☒ No
Taylor's Checkerspot designated critical habitat or suitable habitat?	☐ Yes ☒ No	☐ Yes ☒ No
Mazama Pocket Gopher designated critical habitat or suitable habitat?	☐ Yes ☒ No	☐ Yes ☒ No
Eulachon designated critical habitat or suitable habitat?	☐ Yes ☒ No	☐ Yes ☒ No
Rockfish proposed critical habitat or suitable habitat?	☐ Yes ☒ No	☐ Yes ☒ No
A mature coniferous or mixed forest stand?	☐ Yes ☒ No	☐ Yes ☒ No

4. Will the project involve any in-water work? ☐ Yes ☒ No
5. Will any construction work occur within 300 feet of any perennial or intermittent waterbody that either supports or drains to waterbody supporting listed fish? ☐ Yes ☒ No
6. Will any construction work occur within 300 feet of any wetland, pond or lake that is connected to any permanent or intermittent waterbody? ☒ Yes ☐ No
7. Does the action have the potential to directly or indirectly impact designated critical habitat for salmonids (including adjacent riparian zones)? ☐ Yes ☒ No
8. Will the project discharge treated or untreated stormwater runoff or utilize water from a waterbody that supports or drains into a listed-fish supporting waterbody? ☐ Yes ☒ No
9. Will construction occur outside the existing pavement? If Yes go to 9a. ☒ Yes ☐ No
   9a. Will construction activities occurring outside the existing pavement involve clearing, grading, filling or modification of vegetation or tree-cutting? ☒ Yes ☐ No
10. Are there any Federally listed Threatened or Endangered plant species located within the project limits? If Yes, please attach a list of these plant species within the action area. ☐ Yes ☒ No
11. Does a mature coniferous or mixed forest stand occur within 200' of the project site? ☒ Yes ☐ No

Analysis for No Effects Determination – If there are any Yes answers to questions in Part 5, additional analysis is required. Attach additional sheets if needed.

In order to construct the bicycle/pedestrian lands and sidewalks, the proposed project requires fill and paving currently vegetated areas within the right-of-way, which will include approximately 0.3-acre of wetland and associated buffer vegetation. The Wetland Mitigation Plan describes the measures designed to mitigate for loss

of that wetland and buffer vegetation and other related wetland functions and values. The mitigation includes controlling weedy species and enhancing wetland and buffer vegetation in an area directly adjacent to the northern side of the Discovery Road right-of-way. The City-owned mitigation site contains existing wetland and buffer habitat and is an extension of the same wetland and buffer being filled within the right-of-way.
According to FWS IPAC, federally threatened birds that could occur in the vicinity include marbled murrelet (*Brachyramphus marmoratus*), streaked horned lark (*Eremophila alpestris strigata*), and yellow-billed cuckoo (*Coccyzus americanus*). None of these species occur on or near the project site, as explained below.
Marbled murrelet forage in marine waters, and nest in mature and old-growth conifer forests. They have been observed along shorelines NE of the project area, and are unlikely to utilize forests adjacent to the project area for nesting. No marbled murrelets were observed at the project site. None have been documented in Port Townsend, and the project is not anticipated to affect any potential habitats of the marbled murrelet, as proposed work is confined to the right of way of an existing urban corridor.
The yellow billed cuckoo has not been observed in Washington state for many years and may be extirpated in the state, and the streaked horned lark depends on prairie habitats in southwest Washington and is not known to occur nearby.

One federally threatened plant is also listed by FWS IPAC as possibly in the area – golden paintbrush (*Castilleja levisecta*). However, this plant primarily occurs in open grasslands and prairies, which is not consistent with the ecosystems onsite. No golden paintbrush was observed or is likely to occur within the project limits.
According to the WDFW Priority Habitats and Species mapping tool, priority habitats or species are identified within the project area; however, none were observed within or near the project limits.
Within 0.25 miles of the project area, freshwater emergent wetland aquatic habitat is identified. A great blue heron (*Ardea herodias*) nesting area is also identified in a small, forested area approximately 0.2 miles east of the project site, though it is not likely to be affected by the proposed work.
All project impacts are expected to be minor, temporary disturbances associated with construction. After the project is complete, use of the roadway and surrounding areas will not change from the existing conditions.

Analysis for RRMP ESA 4(d) determination for NMFS – A local agency must be certified by the Regional Road Maintenance Forum to utilize 4(d)**.**

Maintenance Category (check all that apply)

☐ 1. Roadway Surface	☐ 6 Stream Crossings	☐ 11. Emergency Slide/Washout Repair
☐ 2. Enclosed Drainage Systems	☐ 7. Gravel Shoulders	☐ 12. Concrete
☐ 3. Cleaning Enclosed Drainage Systems	☐ 8. Street Surface Cleaning	☐ 13. Sewer Systems
☐ 4. Open Drainage Systems	☐ 9. Bridge Maintenance	☐ 14. Water Systems
☐ 5. Watercourses and Streams	☐ 10. Snow and Ice Control	☐ 15. Vegetation

Describe how the project fits in the RRMP 4(d) Program:

Effect Determinations for ESA and EFH

If each of the questions in the preceding section resulted in a "No" response or if any of the questions were checked "Yes," but adequate justification can be provided to support a "no effect" determination, then check "No Effect" below. If this checklist cannot be used for Section 7 compliance (i.e., adequate justification cannot be provided or a "may effect" determination is anticipated), a separate biological assessment document is required.

	NMFS	USFWS	EFH Determination
☒ No Effect	_____	_____	☒ No Adverse Effect
☐ NLTAA - Date of Concurrence	_____	_____	☐ Adverse Effect – Date of NMFS
☐ LTAA – Date BO Issued	_____	_____	concurrence _____
☐ RRMP 4(d)	_____		☐ Not Applicable

Part 6 - FHWA Comments

Washington State S. T. I. P.

2021 to 2024

(Project Funds to Nearest Dollar)

MPO/RTPO: Peninsula RTPO N Inside Y Outside **August 17, 2021**

County: Jefferson

Agency: Port Townsend

Func Cls	Project Number	PIN	STIP ID	Imp Type	Total Project Length	Environmental Type	RW Required	Begin Termini	End Termini	Total Est. Cost of Project	STIP Amend. No.
04	7627(001)		WA-02145	04	0.820	CE	Yes	Rainier Street	Sheridan Street	5,346,374	2106 AdMod

Discovery Road Bikeway, Roadway and Sidewalk Project

This project reconstructs the roadway and adds curbs, enhanced crosswalks, stormwater drainage and treatment, lighting, and intersection improvements. On the north side of Discovery Road, the project will provide sidewalk and curb ramps. The City received a Ped/Bike Grant from WSDOT and federal funds from Jefferson Co. to construct a two-way bikeway, sidewalk, curb ramps, pedestrian activated flashing beacons, drainage, and pavement marking improvements on the south side of Discovery Road to improve non-motorized safety. The TIB grant will allow for much needed roadway improvements such as minor roadway realignment to create a complete street project,

Funding

Phase	Start Date	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total
PE	2021	STP(US)	228,222	TIB	99,798	0	328,020
RW	2021		0	TIB	80,000	0	80,000
CN	2022		0	Ped/Bike Program	1,442,082	840,000	2,282,082
CN	2022		0	TIB	2,262,589	0	2,262,589
		Project Totals	**228,222**		**3,884,469**	**840,000**	**4,952,691**

Expenditure Schedule

Phase	1st	2nd	3rd	4th	5th & 6th
PE	328,020	0	0	0	0
RW	80,000	0	0	0	0
CN	0	4,544,671	0	0	0
Totals	**408,020**	**4,544,671**	**0**	**0**	**0**

Discovery Road Bikeway and Sidewalks Project

City of Port Townsend, Washington

Wetland Report and Mitigation Plan

October 2021

SCJ ALLIANCE

CONSULTING SERVICES

Project Information

Project:	**Discovery Road Bikeway and Sidewalks** **Wetland Report and Mitigation Plan**
Prepared for:	**City of Port Townsend: Parks, Recreation, and Community Services Department** Laura Parsons, PE Office: (360) 379-4432 x4432 lparsons@cityofpt.us https://cityofpt.us/parksrec

Reviewing Agency

Jurisdiction:	City of Port Townsend

Project Representative

Prepared by:	**SCJ Alliance** 8730 Tallon Lane NE Lacey, WA 98516 360.352.1465 scjalliance.com
Contacts:	Lisa Palazzi, PWS, CPSS
Project Reference:	SCJ # 0699.014

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Responsible Parties	
Applicant	City of Port Townsend Parks, Recreation, & Community Services Department
Applicant's representative/agent.	Laura Parsons, PE, Civil Engineer III lparsons@cityofpt.us 360-379-4432 EXT 4432
Preparer(s) of the wetland delineation report and mitigation plan.	SCJ Alliance - Lisa Palazzi, CPSS, PWS and Erika Whitney, Technical staff Lisa.Palazzi@scjalliance.com 360-352-1465 EXT 137
Preparer(s) of the mitigation construction plans and specifications.	TBD
Party(ies) responsible for monitoring, long-term maintenance, and contingency plans.	City of Port Townsend

1. EXECUTIVE SUMMARY

1.1 Project Summary

This report describes wetland conditions that were initially assessed on September 3rd, 2020 and delineated on January 19th, 2021 along Discovery Road between the Rainier Street roundabout and McClellan Street. Wetland conditions were documented mostly northwest of Discovery Road between Rainier and Eddy Street, west of the intersection with 14th St. (Figure 1). Overflow from this wetland system crosses in a culvert below Discovery Road and the associated ROW west of Eddy Street, and continues into other wetland areas to the south.

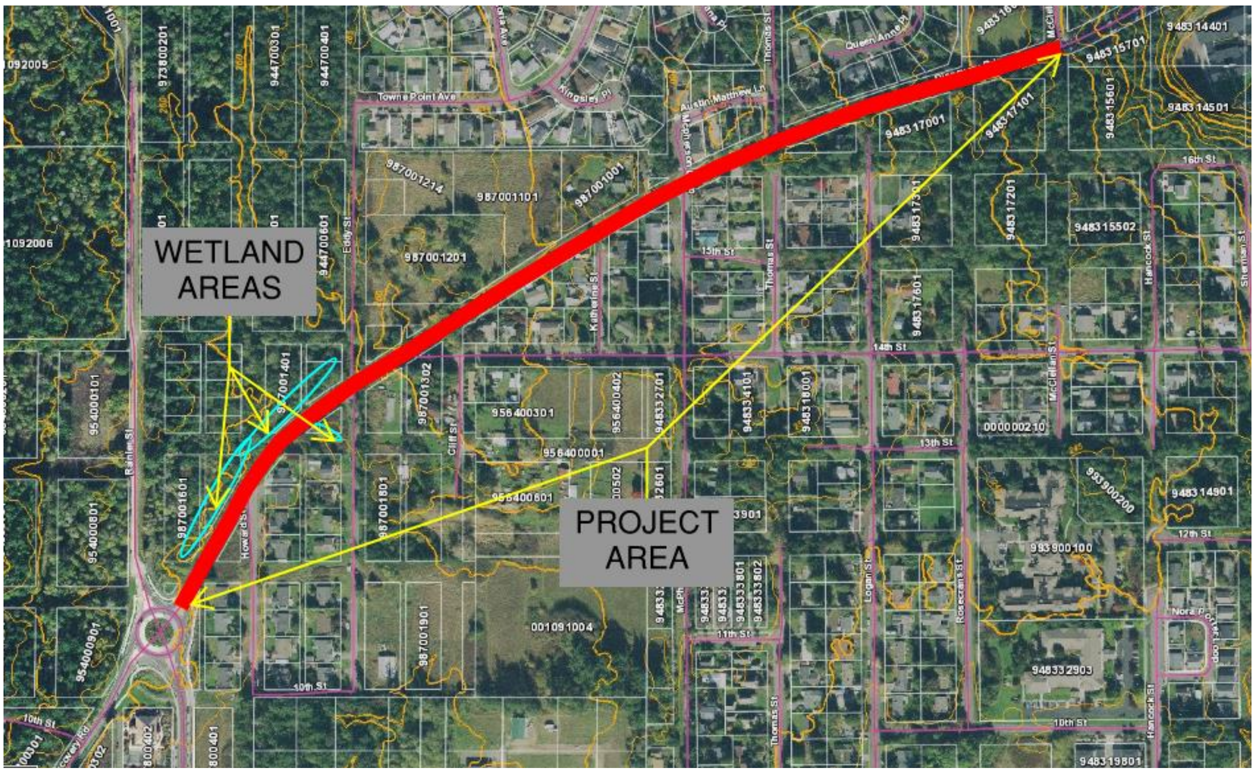

Figure 1. Project area extent and wetland areas

The City is proposing to improve safety conditions along the Discovery Road corridor, in support of the City's Transportation Improvement Plan (TIP). This will include the addition of bike lanes and related facilities – sidewalks, curb ramps, crosswalks, drainage improvements, striping, and enhanced crosswalk features. Drainage improvements will include swales, rain gardens, and/or new stormwater pipes connected to new and existing catch basins.

Road reconstruction and sidewalk expansion within the public road ROW will unavoidably impact directly adjacent wetlands and buffers, but impacts will be minimized and mitigated for by improving wetland and buffer conditions in nearby associated wetland systems.

The improvements will permanently impact 0.033 acres to Wetland N, a Category II wetland (there are no impacts to Wetland S, a Category III wetland), and 0.321 acres of buffer (associated with both Wetland N and Wetland S). Any temporary impacts to adjacent wetland and buffer areas will be minimized as much as possible during construction, and any temporarily impacted areas will be restored and revegetated once construction is complete.

These estimated impact areas are adjusted with standard mitigation replacement ratios (per Table 19.05.110(B). Mitigation Ratios in PTMC 19.05) to determine the minimum areas of wetland and buffer creation/restoration will be required.

We assume that the project can be undertaken within the limits of a federal Nationwide Permit Process, most likely under NWP 14 – Linear Transportation Projects.

Applicant name / address / phone number

City of Port Townsend
250 Madison St
Port Townsend, WA 98368
(360) 344-3064

Agent / consultant

SCJ Alliance
8730 Tallon Lane NE
Lacey, WA 98516
(360) 352-1465

Brief description of the proposed development project (e.g., residential subdivision etc.)

The project is a transportation corridor improvement to a section of Discovery Road located between Rainier Street and McClellan Street, in support of the City's Transportation Improvement Plan (TIP). Reconstruction will include the addition of bike facilities, sidewalks, curb ramps, crosswalks, drainage improvements, striping, and enhanced crosswalk features. Drainage improvements will include swales, rain gardens, and/or new stormwater pipes connected to new and existing catch basins.

Completion of the proposed project will improve the safety of this corridor for pedestrians and bicyclist, and improve connectivity of non-motorized trail systems.

Location of work (e.g., county, city, state, STR [section, township, and range], global positioning system [GPS] coordinates)

- The transportation corridor improvement project is in Port Townsend, Washington, on Discovery Road, running between Rainier Street and McClellan Street.
- The project site is in Township 30N, Range 01W, Sections 9 & 10, and in Water Resource Inventory Area 17, Quilcene-Snow Watershed.
- Latitude/ Longitude coordinates at the SW project end (Discovery Road & Rainier Street. intersection) are Lat. 48.1078, Long. -122.8063. The NE project end (Discovery Road & McClellan Street intersection) coordinates are Lat. 48.1124, Long. -122.7958.

Description of the measures taken to avoid and minimize impacts to the wetland and other aquatic resources (i.e., demonstrate that mitigation sequencing was followed)

Impacts to Wetland N and buffer impacts adjacent to both Wetland N and Wetland S are unavoidable, as the ROW is narrow, and widening the existing road surface within the public ROW to add safety measures – sidewalks and bike lanes – will impact the wetland and buffer areas within the ROW.

To ensure that impacts are minimized, several design iterations of the proposed sidewalks and bike lanes were evaluated. But the only way to reduce impacts would also reduce safety, such as moving the sidewalk or bike lane to be directly adjacent to the paved road surface without an interrupting landscape strip at the road edge. Options that unacceptably reduced public safety were rejected.

Description of unavoidable wetland impacts and the proposed compensatory mitigation (e.g., restoration, creation, enhancement, and/or preservation)

To mitigate for 0.033 acres of permanent impacts to Wetland N (Palustrine Forested, Depressional Category II wetland), a minimum of 0.396 acres of wetland enhancement (a 12:1 ratio) is required. There are no permanent impacts to Wetland S. Proposed mitigation is to enhance up to 0.620 acres of wetland on adjacent City-owned parcels in the form of interplanting native wetland plants and weedy species removal. Any wetland areas in or directly adjacent to the ROW with temporary impacts will be revegetated with native plants common to the surrounding area.

To mitigate for 0.321 acres of permanent buffer impacts (a 1:1 ratio), a minimum of 0.321 acres of buffer enhancement is required. Proposed mitigation is to enhance up to 0.364 acres of buffer on adjacent City-owned parcels, in the form of interplanting native buffer plants and weedy species removal. Any other buffer areas with temporary impacts will be revegetated with native plants common to the surrounding area.

- Size of Impact: about 0.033 acres of Wetland N impact, and about 0.321 acres of buffer impacts
- Cowardin classification: Wetland N: PFO; Wetland S: PSS
- Hydrogeomorphic (HGM) classification: Depressional (both Wetland N and Wetland S)
- Wetland rating scores:
    i. Wetland N: Category II (20 points), Wetland function scores: Water Quality 6; Hydrologic 8; Habitat 6
    ii. Wetland S: Category III (18 points), Wetland function scores: Water Quality 5; Hydrologic 7; Habitat 6
- Buffer widths:
    i. Wetland N: Category II, High Intensity project and Habitat score: 6 – 150 ft
    ii. Wetland S: Category III, High Intensity project and Habitat score: 6 – 150 ft
- Mitigation ratios used (per Table 19.05.110(B), Mitigation Ratios for PTMC 19.05 Critical Areas Ordinance)
    i. Wetland N: Category II – Enhancement – 12:1
    ii. Wetland S: Category III – no impacts

Description of unavoidable impacts to other aquatic resources (e.g., streams, lakes, estuaries)

There is no water body meeting the definition of a stream in the Project Area.

Other details about the proposed mitigation project

- Goals and objectives.
  To enhance wetland and buffer functions in directly adjacent areas outside of the ROW by replanting degraded areas with native vegetation communities similar to those found nearby in the same wetland and buffer systems
- Proposed improvements to the functions and environmental processes of the wetland system.
  No significant watershed-wide improvements are expected as a result of this mitigation. However, invasive species removal in the wetland and buffer mitigation areas adjacent to the project site will improve the quality of existing wetlands and buffers, and will improve and provide new resting and nesting habitat for a variety of bird, small mammal and amphibian species.
- Monitoring period and frequency.

The City of Port Townsend will be responsible for carrying out the monitoring and maintenance programs for the enhanced wetland and buffer planting areas. For this reason, no bonding estimate is provided.

For these kinds of planting plans, a monitoring period of three years is generally sufficient, starting at the end of the first growing season after the plants have been installed. The planted species should survive at a rate of at least 80% by the end of the monitoring period, or should have at least 80% cover by native species, including volunteers (but excluding red alder), and there should be less than 5% cover by weedy species, such as Himalayan blackberry, Scotch broom, Japanese knotweed, tansy, poison hemlock and other noxious weeds.

2. METHODS

2.1 Wetland Delineation Regulations (federal and state)

Under the Washington Administrative Code (WAC) section 173-22-035, the Washington State Department of Ecology (Ecology) requires wetland identification and delineation be completed following the approved federal wetland delineation manual and applicable regional supplements, including but not limited to the 1987 Corps of Engineers Wetland Delineation Manual and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)* (U.S. Army Corps of Engineers 2010). Thus, the same wetland definitions apply in both state and federal law.

Under federal law, wetland fill is regulated, and any wetland crossing is also reviewed for permit compliance, even if no fill is placed in the wetland for the crossing. Minimal impact projects can generally be permitted under a Nationwide Permit (NWP) process, a simpler and less time intensive review. Feedback from the U.S. Army Corps of Engineers (USACE) from a previous comparable mitigation proposal indicates that Nationwide Permit 14, Linear Transportation Projects might be used to authorize the proposal. Under this NWP, the total fill must be less than 0.5 acre, which this project satisfies. The permittee typically must submit a pre-construction notification to the district engineer prior to commencing the activity.

Prior to submitting to the USACE for Section 404 review, the proposal must first be reviewed for Section 401 certification by the Dept. of Ecology if:

1. The project or activity impacts more than more than 1/3 acre of waters of the state.
2. The project includes fill related to a residential and/or commercial development.
3. The project or activity is in or adjoining a known contaminated or cleanup site.

Preliminary feedback from the Dept. of Ecology indicates that the City should submit the JARPA with associated supporting documentation to both the Dept. of Ecology for Section 401 certification and to the USACE for Section 404 review. The current process indicates that the proposal must first receive the 401 water quality certification before the USACE 404 review can start. But in cases when the impacts are negligible, concurrent by the two agencies review may be possible.

2.2 Wetland Rating, Classification, and Buffers

City of Port Townsend municipal code (MC) defines wetland and stream protection standards in chapter 19.05 (Critical Areas), which includes requirements for rating the wetland and making buffer width determinations based on rating score results. The wetland buffer widths for wetlands, based on their Category rating result and habitat score, are assigned per Table 1 below.

Table 1. Wetland Buffer Widths for Category II and Category III wetlands		
PTMC Table 19.05.110(A). Buffer Widths		
Wetland Characteristics	**Buffer Widths by Impact of Land Use**	**Other Measures Recommended for Protection**
Category II Wetlands		
High Level of Function for Habitat (Score for Habitat 8 – 9 Points)	Low – 150 feet Moderate – 225 feet High – 300 feet	Maintain connectivity to other natural areas.
Moderate Level of Function for Habitat (Score for Habitat 5 – 7 Points)	Low – 75 feet Moderate – 110 feet High – 150 feet	Reserved.
High Level of Function for Water Quality Improvement and Low for Habitat (Score for Water Quality 8 – 9 Points; Habitat Less Than 5 Points)	Low – 50 feet Moderate – 75 feet High – 100 feet	No additional discharges of untreated runoff.
Estuarine	Low – 75 feet Moderate – 110 feet High – 150 feet	Reserved.
Wetlands in Coastal Lagoons	Low – 75 feet Moderate – 110 feet High – 150 feet	Reserved.
Interdunal	Low – 75 feet Moderate – 110 feet High – 150 feet	Reserved.
Not Meeting above Characteristics	Low – 50 feet Moderate – 75 feet High – 100 feet	Reserved.
Category III Wetlands		
Moderate Level of Function for Habitat (Score for Habitat 5 – 7 Points)	Low – 75 feet Moderate – 110 feet High – 150 feet	Reserved.
Score for Habitat 3 – 4 Points	Low – 40 feet Moderate – 60 feet High – 80 feet	Reserved.

For wetland impacts within the City of Port Townsend, as required in City of Port Townsend Code, wetlands were rated according to the *Washington State Wetland Rating System for Western Washington* (Ecology Publication #14-06-029, replacing #04-06-025). This system scores Wetland Rating Units (WRUs) based on the functions of water quality, hydrology, and habitat, which is used to assign a buffer to affected areas on County lands. This system also reviews the WRU's sensitivity to disturbance and rare or non-replaceable wetland characteristics.

Wetlands identified as part of this project were classified according to the USFWS Cowardin classification system (Cowardin et al. 1979) and the USACE Hydrogeomorphic (HGM) classification system (Brinson 1993).

2.3 Isolated Buffers Regulations

PTMC Section 19.05.110

G7. Buffer Waivers. Application of the buffers set forth in this section may be waived by the director in instances where either of the following findings are made:

a. The parcel to be developed lies landward of an existing and substantial structural development on an intervening lot which separates the parcel from the wetland and has effectively eliminated the function and value to be derived from the required buffer width; or

b. The parcel to be developed lies landward of an existing legally established roadway or other legally established structure or paved area 16 feet or more in width which separates the parcel from the wetland and has effectively eliminated the function and value to be derived from the required buffer width.

2.4 Mitigation Guidance

"Compensatory mitigation" means replacing or rectifying a critical area impact or buffer loss. Compensatory mitigation can include, but is not limited to:

- Creation – To intentionally establish the lost wetland/habitat function where it did not formerly exist.
- Enhancement – To improve the condition of an existing degraded wetland/habitat so that the functions they provide are of a higher quality. Enhancement of critical areas may be used for partial compensatory mitigation per the requirements of this chapter.
- Preservation – To ensure the permanent protection of existing, high-quality wetlands/habitats.
- Restoration – To reestablish functional characteristics and processes.

Table 2. Mitigation Ratios Table from Port Townsend Critical Areas Ordinance

PTMC Table 19.05.110(B). Mitigation Ratios				
Category and Type of Wetland	**Re-establishment or Creation**	**Rehabilitation****	**1:1 Re-establishment or Creation (R/C) and Enhancement (E)**	**Enhancement Only**
All Category IV	1.5:1	3:1	1:1 R/C and 2:1 E	6:1
All Category III	2:1	4:1	1:1 R/C and 4:1 E	8:1
Category II – Estuarine	Case-by-case	4:1 Rehabilitation of an estuarine wetland	Case-by-case	Case-by-case
Category II – Interdunal	2:1 Compensation must be interdunal wetland	4:1 Compensation must be interdunal wetland	Not considered an option***	Not considered an option***
All Other Category II	3:1	6:1	1:1 R/C and 8:1 E	12:1
Category I – Forested	6:1	12:1	1:1 R/C and 20:1 E	24:1
Category I Based on Score for Functions	4:1	8:1	1:1 R/C and 12:1 E	16:1
Category I Natural Heritage Site	Not considered possible*	6:1 Rehabilitation of a Natural Heritage site	Not considered possible*	Case-by-case
Category I – Coastal Lagoon	Not considered possible*	6:1 Rehabilitation of a coastal lagoon	Not considered possible*	Case-by-case
Category I – Bog	Not considered possible*	6:1 Rehabilitation of a bog	Not considered possible*	Case-by-case
Category I – Estuarine	Case-by-case	6:1 Rehabilitation of an estuarine wetland	Case-by-case	Case-by-case

2.5 Background Materials

To help determine the site conditions that might affect delineation and rating results, SCJ Alliance staff reviewed at least the following information to provide site information:

- Jefferson County and Port Townsend GIS mapping systems
- US Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) map (USFWS 2021)

- US Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Soil Survey Geographic database online Web Soil Service. (WEBS Soil Survey 2021)
- US Army Corps of Engineers User's Guide for Nationwide Permits in Washington State March 2017 – March 2022, Effective Date March 1, 2018
- US Army Corps of Engineers Reissuance and Modification of 16 Nationwide Permits, Effective Date March 15, 2021
- Precipitation data (US Climate Data 2021)
- Washington State Department of Fish and Wildlife (WDFW) Priority Habitat and Species (PHS) Database (WDFW PHS 2021)
- WDFW Salmon Scape database and mapping system (WDFW 2021)
- Washington State Department of Natural Resources (DNR) FPARS stream mapping system (DNR 2021).
- Washington State Department of Ecology Publication #06-06-011a, *Wetland Mitigation in Washington State – Part 1: Agency Policies and Guidance* and *Part 2: Developing Mitigation Plans (Version 1)*, dated March 2006.
- Google Earth historic timeline aerial photos of the project area

2.6 Assessing Wetlands and Soils Onsite

SCJ Alliance staff, Lisa Palazzi, CPSS, PWS and Hans Shepherd, Planner, delineated onsite wetland boundaries adjacent to the project area on January 19th, 2021.

Some wetland areas north of Discovery Road had been previously delineated during work carried out for various projects along the Howard Street and Rainer Street between the mid-1990s up to the present.

SCJ Alliance reviewed earlier mapping and report work, as it was associated in various ways to the systems being assessed for this project. In general, wetland hydrology conditions in the basin have not changed significantly over the past decade, and recent delineation work carried out in the past 5 years is still mostly valid, although wetland ratings and buffers may have changed .

The Wetland N boundary within the ROW along the NW side of Discovery Road as well as a culvert crossing and ditch outflow between Howard and Eddy that sends overflow to the south (flowing into offsite Wetland S) was marked using pink flagging, labeled "WETLAND DELINEATION" and numbered sequentially. Paired sample plots were dug within the existing wetlands and within adjacent upland areas, on either side of a specific numbered flag. Hydric soils were evaluated using the Munsell Soil Chart. A map of the flagging and a digital file with handheld GPS waypoints was provided to the project engineer.

3. RESULTS AND DISCUSSION

3.1 Project and Development Site Description

This report describes wetland conditions that were evaluated on January 19th, 2021 along Discovery Road between Rainier Street and Eddy Street, west of the intersection with 14th Avenue. Results of the wetland delineation and rating are provided below, in relation to a plan to address safety issues adjacent to this section of Discovery Road.

The road system expansion project will add sidewalks and bike lanes designed to improve safety along this busy corridor. The current two-lane road surface has only a minimal shoulder, making walking or

biking hazardous. Grant Street Elementary School is sited at the northeast end of the project; therefore, this corridor also serves a large population of elementary school students.

The project area is in Port Townsend, in Sections 9 and 10, Township 30N, Range 01W. It is in Water Resource Inventory Area 17, Quilcene/Snow watershed and HUC Unit 171100200102 (Beckett Point-Frontal Discovery Bay). The project area extends along Discovery Road from the Rainer Street roundabout (approx. 260 ft elevation) northeast to McClellan Street (approx. 229 ft elevation). Latitude/ Longitude coordinates for the northeast and southwest ends of the project area are:

- 48.279069 Lat., -122.7958 Long. (McClellan)
- 48.108206 Lat., -122.806061 Long.(Rainer RAB)

The ROW area is mostly grassed with minor inclusions of shrubby vegetation in upland as well as in wetland areas, but the majority of the large adjacent wetland outside of the ROW to the northwest is a Palustrine Forested (PFO) system (Wetland N), and the small wetland swale area southeast of the roadway is Palustrine Scrub-Shrub (PSS) (Wetland S).

To mitigate for unavoidable wetland and buffer impacts, this report also includes a Mitigation Plan.

3.2 Wetland Delineation Overview

SCJ Alliance wetland scientist (Lisa Palazzi, CPSS, PWS, assisted by Hans Shepherd, Planner) carried out an initial detailed reconnaissance in September 2020 along the entire project ROW between Rainier Road and McClellen Street. This work was intended to identify any potential wetlands in the ROW or close enough to have potential buffer impacts. This initial work was followed by detailed assessment and delineation of wetlands within the ROW on January 19th 2021, applying standard methodology described in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0) (U.S. Army Corps of Engineers 2010).

The wetland delineation and assessment work was provided to assist with avoiding or minimizing wetland impacts, if possible. The proposed sidewalk location must be within the ROW, which limits flexibility.

3.2.1 Project Area Climate

The closest NRCS WETS weather station that has long-term air temperature data is in Sequim, WA. However, weather conditions in Sequim are quite different from in Port Townsend. Sequim area is in the rainfall shadow of the Olympic mountains, but also receives weather from the Straits of Juan de Fuca; Port Townsend is affected by the rain shadow, but less so than Sequim, and because it is on a peninsula, has a weather pattern that is greatly moderated by surrounding large water bodies.

The Sequim long-term weather station indicates that the 28 °F "Growing Season" starts on April 6. However, plants were actively growing at the Port Townsend project site during the January 2021 site visit, as is often the case in Port Townsend. In Port Townsend, by early to middle February in most years, more than 4 dominant plants are usually actively growing.

There is a closer NRCS weather station south of Port Townsend at Chimacum 4 S, but the Chimacum station does not have a long term temperature record – only precipitation, which has been recorded since 1927. Because the Chimacum Station is closer with rainfall patterns that more closely resemble those in Port Townsend, rainfall records from Chimacum were used to determine whether field work was carried out during a period of excessive rainfall. The precipitation data from Chimacum was compared to precipitation data from Sequim, as patterns are likely to be similar even though rainfall totals are likely to differ.

The standard preceding rainfall analysis for wetland projects is based on rainfall records for the three months prior to field work in comparison to long-term averages. Results are provided below in Table 3 for both weather stations. The analysis indicates that rainfall conditions over the three months prior to the January 2021 field work were "normal", at both stations, but at the wetter end of normal. That said, there was no rainfall in the two days before the Jan 19 site visit at either station, but total rainfall during the ten days prior to the January 2021 field work was 42% above average, according to the Chimacum 4 S WETS station (expected = 1.14 in, observed = 1.62 in). This was taken into account when carrying out delineation work.

The wetland hydrology at the Project Area was fully developed at the time of SCJ field work. Both deciduous and herbaceous wetland vegetation were starting to burst bud. Thus, even though the work was carried out in mid- to late-January, conditions indicated that the growing season was underway. Based on site indicators, hydrology conditions expressed during the site visit are expected to persist well into the growing season – i.e., would persist at least through the end of February and into March in most years. Conditions for technically correct wetland delineation were good.

Table 3. Sequim Precipitation record for field work time period

Month	30% <	Avg	30% >	PPT (in.)	Condition	Condition Value	Month Weight Value	Product
December	0.87	1.52	1.85	3.55	W	3	3	9
November	1.87	2.68	3.19	2.97	N	2	2	4
October	1.52	2.26	2.71	1.1	D	1	1	1
			Total:	7.62				14 Normal (high end)

Source: AgACIS for Sequim 2E, WA (NRCS 2021)

Growing Season: 4/6 to 11/3: 211 days 50% chance of 28F or higher

Table 4. Chimacum Precipitation record for field work time period

Month	30% <	Avg	30% >	PPT (in.)	Condition	Condition Value	Month Weight Value	Product
December	1.21	2.16	2.63	4.09	W	3	3	9
November	2.56	4.06	4.9	3.95	N	1	2	2
October	2.69	4.24	5.11	1.15	D	3	1	3
			Total:	9.19				14 Normal (high end)

Source: AgACIS for Chimacum 4 S, WA (NRCS 2021)

Growing Season: No long term Temperature records available

3.3 Wetlands Description at the Project Area

Wetland areas outside of the road ROW were not delineated, but past work by others in the surrounding area to the north and south documents that the wetlands assessed within the ROW are part of a larger wetland complex – a chain of wetland systems that have formed within a broad swale that slopes mildly from northwest to southeast across a remnant glacial upland plain (Figure 2).

Two wetland areas were assessed, one system on the north side of Discovery Road (Wetland N) and one to the south (Wetland S). Wetland N is a Palustrine Forested (PFO) system, fed by a combination of shallow surface water and groundwater that flows from the northwest. The source of hydrology is primarily from direct precipitation , which infiltrates, then perches above a shallow impermeable to slowly permeable substrate of densic glacial till and glaciolacustrine sediments. The perched water table drains downslope through the soil within a few feet of the soil surface across the glacial till substrates. As a result, these wetlands are dependent on seasonal precipitation, and may not hold water for months at a time, but are easily refilled by regular rainfall during winter months and into the spring. Once winter storms abate and dormant plants start growing again, these systems are expected to become increasingly dry as summer drought progresses and may not have hydrology by mid to late summer in most years.

Wetland N overflows to the south through a culvert under Discovery Road to Wetland S, which is a small narrow Palustrine Scrub-Shrub (PSS) system laying just outside of the ROW to the south. The hydrologic flow pathway continues to the southeast and feeds into other wetlands. Wetland S receives overflow from Wetland N via a culvert under the road and a small roadside ditch that leads from the culvert to an interior ditch that flows through Wetland S.

There are permanent impacts to Wetland N and its buffer in the ROW. There are no direct impacts to Wetland S, but there are permanent impacts to its buffer within the ROW.

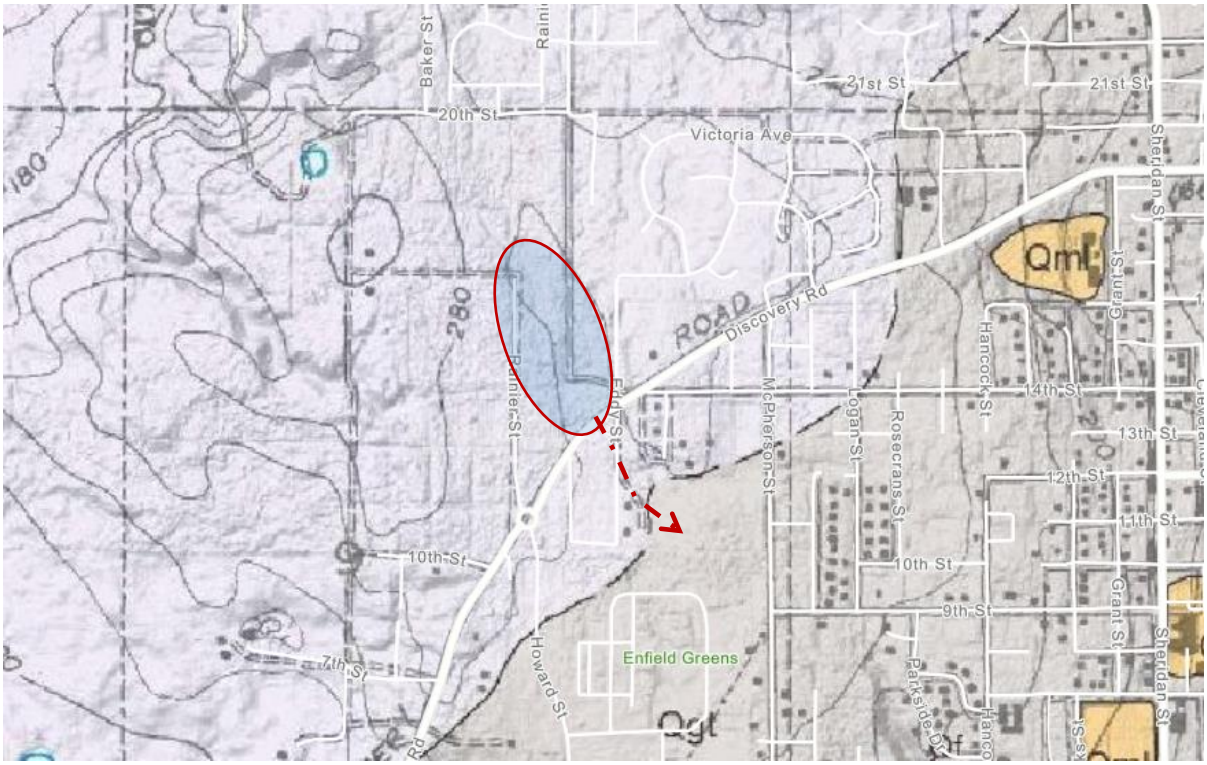

Figure 2. Swale feature leading to the crossing at Discovery Road and SE flow pathway

3.3.1 Rating Result

The 2014 Washington State Wetland Rating System for Western Washington (WRSWW) was used to rate the wetlands.

Results for WL-N indicated a Category II Wetland (20 points). Wetland function scores were: Water Quality 6; Hydrologic 8; Habitat 6. The standard wetland buffer for a Category II wetland system with a Habitat score of 6 with a High Intensity Development proposal (i.e., road widening) is 150 ft.

Results for WL-S indicated a Category III Wetland (18 points). Wetland function scores were: Water Quality 5; Hydrologic 8; Habitat 5. The standard wetland buffer for a Category III wetland system with a Habitat score of 5 with a High Intensity Development proposal (i.e., road widening) is also 150 ft.

3.3.2 Wetland Classification

The Wetland N Cowardin classification is PFO. Hydrogeomorphic (HGM) classification is Depressional. The wetland is forested, dominated by Oregon ash, red alders and willows with some quaking aspen around the wetland perimeter to the south, and with an understory of cluster rose, Nutka rose, spiraea, creeping buttercup and slough sedge. Because site work was carried out in winter months when the trees were lacking leaves and non-persistent plants were just starting to grow, plant species identification may be limited.

The Wetland S Cowardin classification is PSS. Hydrogeomorphic (HGM) classification is also Depressional. The wetland is shrubby, dominated by Nutka wild rose and hardhack with some quaking creeping buttercup and snowberry around the wetland perimeter. The dense thorny rose growth made it effectively impossible to get more than a few feet into the wetland edge.

3.3.3 Wetland Hydrology

At the southern end of Wetland N, wetland hydrology was ponded above the surface just outside of the ROW, and saturated to the surface within the ROW. At the northern end near Eddy Street, current hydrology was conspicuously absent during field work, but there were several primary hydrology indicators, including water marks, algal mats and a sparsely vegetated concave surface, stunted or stressed plants.

Wetland S is very narrow at the edge of the ROW, due to receiving inflow from a narrow ditch that continues inside of the wetland, draining through to the south. Wetland hydrology was only present within 12 inches of the surface in an area about 2-3 ft wide (which included the 10-inch wide ditch) at the edge of ROW. Lidar topography indicates that the wetland farther south within the adjacent parcel widens to about 6-10 ft, but farther south is affected by other culverted road crossings, roadside ditches and related development.

The primary hydrology source for both of these wetlands is seasonal precipitation that infiltrates into shallow glacial soils to the northwest, then drains downslope subsurface across relatively impermeable glacial substrates to pond in depressional areas. The contributing basin slopes from northwest to southeast across Discovery Road and continues to the southeast into other wetlands.

3.3.4 Wetland Soils

Soils throughout the project area are mapped as Clallam gravelly sandy loam, 15% slopes. The Jefferson County Soil Survey map is a lower precision level survey, with large map units – particularly in urban areas. Therefore, wetland areas are often treated as inclusions in large upland maps units. The Clallam soil series is typically expected to be moderately well drained, with about 2.5 to 3 ft of well drained gravelly soil overlaying a densic glacial till substrate. The soil typically develops a seasonal perched water

table at about 2.5 ft that persists throughout winter months. For this reason, the Clallam soil map unit in Port Townsend often includes depressional areas with a water table at or near the surface. If mapped separately, these areas would likely be wetland soils, such as the Agnew silt loam, Bellingham silty clay loam or McKenna gravelly loam.

The hydric (wetland) soils observed in the wetland areas along the north and south sides of Discovery Road have characteristics most like the McKenna soil series – i.e., a gravelly loam surface over a restrictive subsurface layer in a depressional landscape.

3.3.5 Wetland N Vegetation Community at the Project Area

Wetland N is a seasonally-wet, forested wetland that has developed in the base of a broad relatively flat swale depression oriented from northwest to southeast across Discovery Road (Figure 2). This system is almost 100% dependent of precipitation as a hydrology source, and as a result, is only seasonally wet. It is dominated by Facultative to Facultative Wet vegetation. At the far southern end, there is a cluster of quaking aspen, mostly outside of the wetland in the buffer area, but not enough to change the rating result. The rest of the wetland is dominated mostly by Oregon ash or willow species.

Wetland and upland plants that were documented during the field delineation work near and at the project site in January 2021 are listed below. Note that this list will not include some of the non-persistent herbaceous plants that would grow later in the spring, and some deciduous woody plants that were not yet leafed out may have been missed or misidentified during the January 2021 site visit.

WL-N Wetland Plants (Figure 3)

Trees

- Oregon ash (Fraxinus latifolia) FACW
- Pacific willow (Salix lasiandra) FACW
- Red Alder (Alnus rubra) FAC
- Black cottonwood (Populus trichocarpa) FAC
- Scouler's willow (Salix scouleriana) FAC
- Quaking aspen (Populus tremuloides) FACU

Shrubs

- Spirea douglasii (Spiraea douglasii) FACW
- Sitka willow (Salix sitchensis) FACW
- Hooker willow (Salix hookeriana) FACW
- Cluster rose (Rosa pisocarpa) FAC
- Nootka rose (Rosa nutkana) FAC
- Salmonberry (Rubus spectabilis) FAC
- Wild crabapple (Malus fusca) FACW
- Red osier dogwood (Cornus sericea) FACW

Grasses, ferns, herbs and vines

- Reed canarygrass (Phalaris arundinacea) FACW
- Slough sedge (Carex obnupta) OBL
- Common rush (Juncus effusus) FACW
- Lady fern (Athyrium filix-femina) FACW
- Stinging nettle (Urtica dioica) FAC
- Creeping buttercup (Ranunculus repens) FAC
- Skunk cabbage (Lysichiton americanum) OBL
- Horsetail (Equisetum arvense) FAC
- Pasture grasses (misc.) On average – FAC

Figure 3. Typical wetland vegetation along N side of Discovery Road.

WL-N Upland Plants (Figure 4)

Trees

- Quaking aspen (Populus tremuloides) FACU
- Douglas fir (Pseudotsuga menziesii) FACU
- Pacific madrona (Arbutus menziesii) NI
- Scouler's willow (Salix scouleriana) FAC
- Black cottonwood (Populus trichocarpa) FAC

Shrubs

- Salal (Gaultheria shallon) FACU
- Cluster rose (Rosa pisocarpa) FAC
- Nutka rose (Rosa nutkana) FAC
- Common snowberry (Symphoricarpos albus) FACU
- Cascara (Frangula purshiana) FAC
- Scouler's willow (Salix scouleriana) FAC
- Indian Plum (Oemleria cerasiformis) FACU
- Oceanspray (Holodiscus discolor) FACU
- Scotch broom (Cytisus scoparius) NI

Grasses, ferns, herbs and vines

- Bracken fern (Pteridium aquilinum) FACU
- Himalayan blackberry (Rubus armeniacus) FAC
- Trailing blackberry (Rubus ursinus) FACU
- Stinging nettle (Urtica dioica) FAC
- Horsetail (Equisetum arvense) FAC

Figure 4. Typical upland vegetation in naturally vegetated project area buffers.

3.4 Assessment of Impacts in the Project Area

The Discovery Road project is a public safety project, which will add sidewalks, a bike lane and landscaping belts to this busy urban corridor. The project area road section is commonly used as an alternate cross town driving route and serves a local elementary school. The project impacts will occur only within the public street ROW, but some of the adjacent wetlands on the NW side of the road seep into the outer edge of the ROW at five locations.

There is no way to provide sidewalks and bike lanes along this corridor without impacts to wetlands and their buffers. However, impacts were minimized, resulting in 0.033 acres of wetland impacts in Wetland N, and 0.321 acres of the 150 ft wetland buffer impacts for both Wetland N and Wetland S within the ROW (Figure 5).

Although the majority of Wetland N outside of the ROW is forested, the wetland and buffer areas within the ROW are mostly vegetated by herbaceous vegetation or small shrubs. Thus, project impacts are limited to portions of the wetlands and buffers already impacted by proximity to the road and standard road use and maintenance activities, such as periodic mowing of the ROW to preserve safety view corridors and to clean out ditches, as well as narrow public paths that are worn into some of the vegetated roadway margins.

Figure 5 shows the entire wetland impact corridor, and the following Figure 6 shows more detailed viewed of corridor sections.

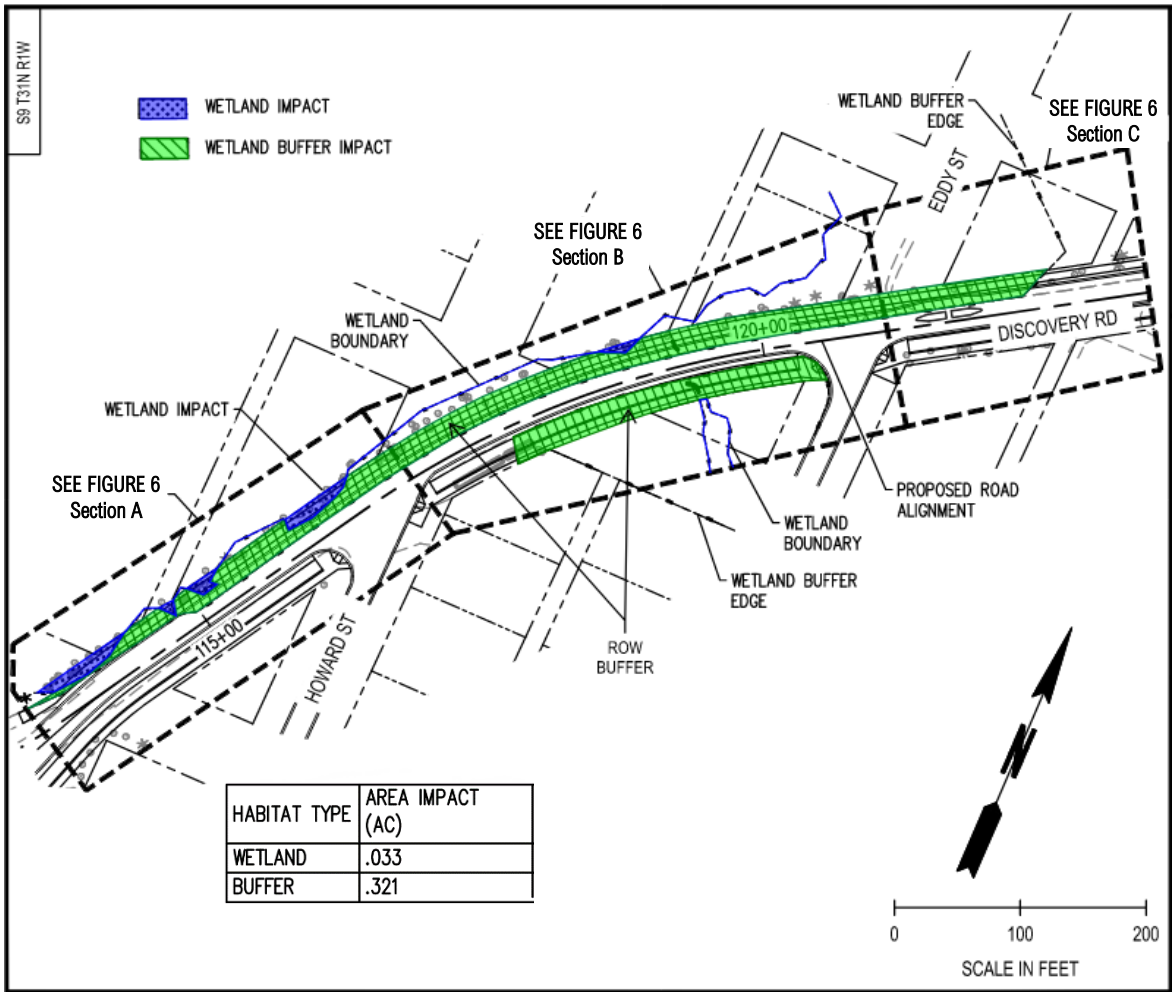

Figure 5. Showing all Project Site wetland (blue) and buffer (green) impacts between Rainier Road and Eddy Street at southern end of project area.

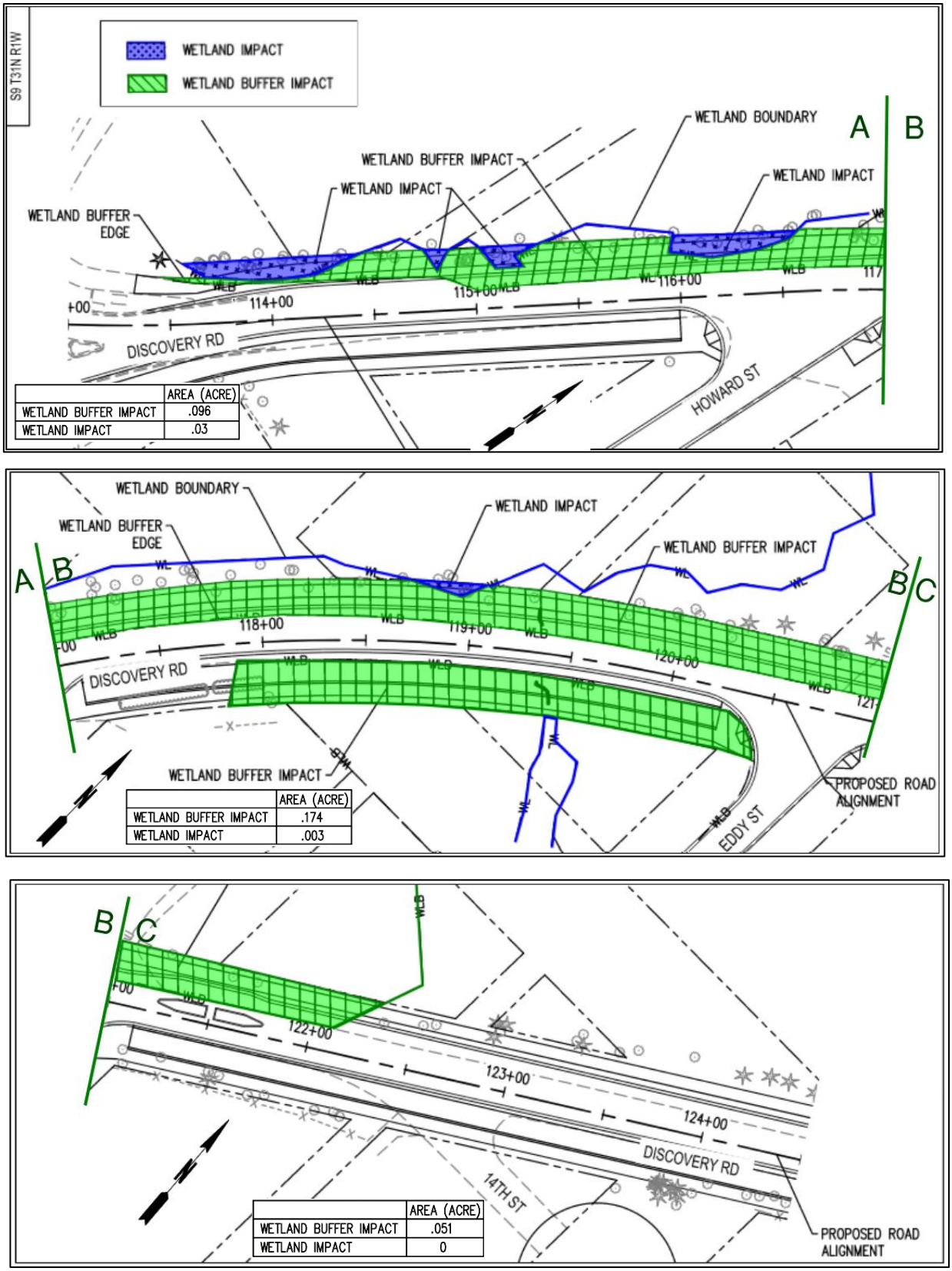

Figure 6. Section A, B and C Wetland and Buffer impacts.

4. MITIGATION PROPOSAL

4.1 Mitigation Goals and Objectives

1) To enhance up to 0.62 acres of wetland and up to 0.36 acres of buffer in publicly owned wetland and buffer areas in the mitigation area adjacent to the project area.
2) To remove weedy vegetation in wetland and buffer areas in the mitigation area adjacent to the project area.
3) To interplant a suite of native species comparable to what occurs in the higher quality adjacent native wetland and buffer areas.
4) To add fencing and other natural or man-made structures that will encourage sidewalk and bike trail users to remain on the trails.
5) To increase public knowledge about wetland and buffer systems by preserving space for future interpretative kiosks or overlooks that provide information about the natural systems.

4.2 Mitigation Replacement Ratios

To mitigate for 0.033 acres of permanent Palustrine Forested, Depressional Category II wetland impacts, between 0.4 (minimum required) and 0.62 acres of wetland will be enhanced (a 12:1 ratio). To mitigate for 0.321 acres of buffer impacts, 0.36 acres of wetland buffer will be enhanced (slightly greater than a 1:1 ratio) – a total of 0.98 acres. This work will be concentrated in publicly owned parcels near the north end of the wetland. This work will be carried out by removal of weedy vegetation and subsequent interplanting of native plant species in the target mitigation area.

Temporary impacts: Any wetland or buffer areas with temporary impacts from construction will be revegetated with native plants common to the surrounding area.

Table 5 shows the permanent and temporary impact estimated measurements from the proposed road improvements to both wetlands and buffers.

Table 5. Wetland and Buffer Impacts and Proposed Mitigation

Habitat Type	Area Impacted (ac)	Mitigation Ratio (Enhancement)	Minimum Required Mitigation (ac)	Proposed Mitigation (ac)	Overage (ac)
Wetland	0.033	12:1	0.396	0.620	0.226
Buffer	0.321	1:1	0.321	0.364	0.043

4.3 Wetland/ Buffer Enhancement Plan Overview:

Permanent wetland and buffer impacts at the Project Site will be mitigated by removing weedy species and enhancing wetland and buffer plant communities on publicly owned parcels (TPN 987001401 and 987001410) adjacent to the ROW Project area west of Eddy Street (Figure 7).

Wetlands within these parcels have been delineated in the past, and results from the past work indicates at least 0.62 acres of wetland and 0.36 acres of buffer in the 0.98 acres of publicly owned lands. The wetland and buffer areas on these parcels have been impacted to varying degrees in the past due to immediate proximity to the Discovery Road ROW to the south, the Eddy Street public trail to the east, and a secondary public trail in the 15th street easement to the north.

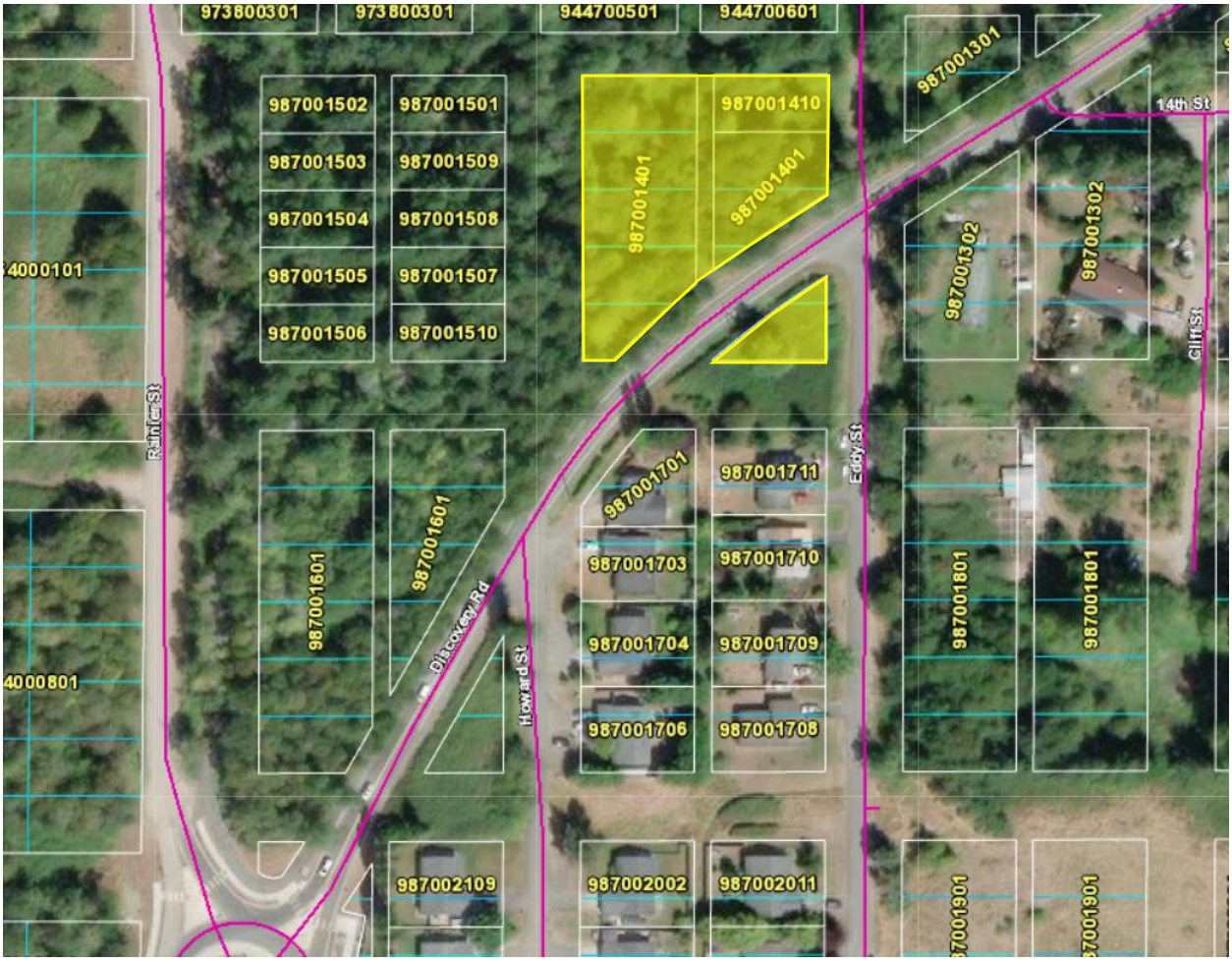

Figure 7. Target wetland and buffer enhancement parcels.

Some understory areas are bare of vegetation from obvious and regular public entry (Figure 8). Despite these impacts, conditions overall across the target area are relatively good, and enhancement work has a high likelihood of success. Wetland and buffer edges near the adjacent trail and road systems include invading and expanding weedy vegetation – particularly Himalayan blackberry, but also Scotch broom and other weedy species.

Enhancement efforts will start with weed eradication activities along the perimeter trails and road ROWs, and as needed in the wetlands and buffer interior areas. Once the mitigation area is cleared of weedy vegetation – which may take 1-2 years of initial effort – wetland and buffer edge areas will be densely replanted with vegetation chosen to discourage access to the interior, such as a mix of wild rose species and salmonberry. The interior plantings on currently barren or low density wetland or buffer areas will be interplanted with other species common to the surrounding wetland and buffer environments, such as willows, slough sedge, rushes and Oregon ash in the wetlands, and salal, Oregon grape, sword fern and quaking aspen in the buffer (see species list above).

Replanting work will be accompanied by fencing and signage along the three ROW boundaries to discourage entry and trampling of the newly planted areas, and to discourage future entry into the mitigation site. Adding more native trees and shrubs, as well as more sedges. rushes and other herbaceous plants will provide new habitat opportunities in this currently degraded wetland and buffer system.

Figure 8. Impacted wetland interior with evidence of regular public entry compared to similar wetland nearby without public entry indications.

4.4 MONITORING AND MAINTENANCE

The City of Port Townsend will be responsible for monitoring success in the selected mitigation planting areas. Because this mitigation does not involve wetland creation, 3 years of annual end of growing season monitoring (starting at the end of the first growing season after the last plants are in the ground) should be adequate to ensure that the mitigation areas are developing as planned.

The mitigation/monitoring target will be to attain a minimum of 80% survival of new plants, and/or 80% cover by native plants, and less than 5% cover by non-native weedy plant species (including but not limited to Scotch broom and Himalayan blackberry).

Vegetation community enhancement will provide a lift in ecosystem function by providing improved habitat for wildlife species as well as improved water quality and flood storage functions, targeting creation of a more complex native wetlands forest and shrub habitat condition.

4.4.1 Planting Plan

After completing initial weed control efforts, the wetland and buffer areas shown in Figure 9 will be planted with native wetland and buffer vegetation typical of the surrounding area (see plant lists in Section 3.3.5). If needed to suppress competing weedy vegetation, the area around each new plant will be covered with 3-4 inches of mulch to trap soil moisture and minimize winter erosion during early plant establishment periods.

Because most areas will be interplanted among existing native plants, spacing will vary, but the target spacing for tree species should be 10 ft, for shrubs 5 ft, and for herbs, 2 ft. Planting zones for wetland versus buffer vegetation groupings will be established after carrying out a detailed onsite assessment of the mitigation area. The plants identified for each zone should be randomly placed, with similar species clumped to mimic how a naturally vegetated area would be expected to establish.

Irrigation may be needed for the first two seasons during the drought season (late Summer to Fall). Once the plants have established, no more irrigation will be necessary.

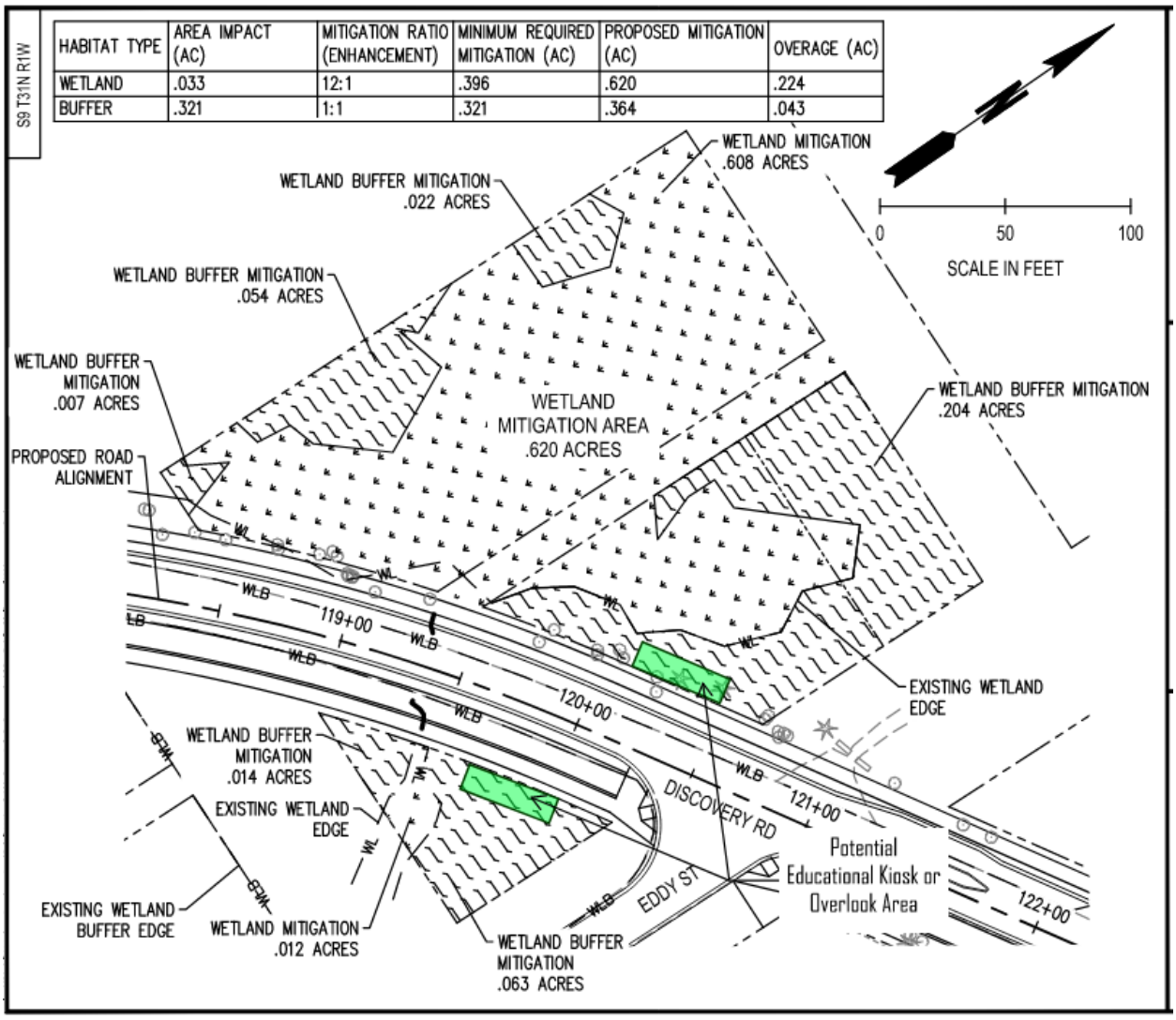

Figure 9. Wetland and Buffer Mitigation Enhancement Area west of Eddy Street.

Soils and planting materials

- Soil type: Existing soils in upland areas are expected to be gravelly sandy loams or silt loams in good condition. No need for soil amendments is expected unless the topsoil (upper 6-12 inches of the soil profile) has been graded away. Soils within and along the wetland edge should also be in relatively good condition with high organic matter content. No soil amendments should be needed.
- Soil compaction level: Compaction is not expected to be a concern for plant growth unless initial weed control efforts create compacted areas. If so, as needed, compacted area will be rototilled to at least 12 inches depth to break up sealed layers.
- Mulching required: 2-3" of mulch will be spread on the surface around each tree and shrub plant in areas where weed control is necessary, but pulled back slightly from the plant stem to minimize impacts to the root crown and stem. Mulch and plant materials will be wheel-barrowed to planting areas to minimize soil compaction.
- Weed seeds: Areas with Scots broom will have viable seeds for at least 10 years after the last plant blooms and goes to seed. Less soil disturbance will result in lower rates of seed sprouting;

however, we anticipate that new Scotch broom seedlings will need to be hand-pulled every year to ensure that the weedy condition does not redevelop over time.

- Himalayan blackberry: The most effective control method for dense stands of Himalayan blackberry is to spray foliage with Garlon 3A[1] while the plant is actively growing, ideally when flowering. This maximizes translocation to the roots, but may take two seasons of application to achieve close to 100% control.

  If herbicide application is not preferred, then removal of the above-ground canes (before flowering and setting seed) and careful and compete excavation and removal of plant roots using something equivalent to a mini-excavator is an alternate approach. The entire plant carcasses must translocated to a safe location offsite where they can fully dry before transferring to a dump site or public mulching operation. This approach results in significant soil disturbance, and will require appropriate use of erosion control BMPs.

  It is difficult if not impossible to achieve full control of this weed, partly due to reintroduction of seeds by birds over time. But suppression with appropriate application of herbicides and/or removal of roots and canes can be effective as long as the effort continues over time.

The list of mitigation options below will be used to further minimize and compensate for the Discovery Road impacts to wetland and buffer in the road ROW project area.

- Areas along the public path on all three sides of the target mitigation area will be fenced and signed explaining that the other side is a wetland/buffer mitigation planting area and entry is not allowed.
- Potential locations for public education kiosks or overlooks in buffer areas are marked on the Figure 9 map adjacent to Discovery Road. In the future, these target sites may be developed to explain the value of wetlands and the purpose of the mitigation project.
- During Project construction, temporary silt fencing will be placed along the construction zone perimeter at the edge of the ROW, to ensure that no sediment from construction enters the mitigation site wetlands or buffers.
- Any temporary impacts to vegetation or soils from construction outside of the defined mitigation planting areas will be repaired and revegetated (replacing what was in place prior to construction) when the road improvement project construction is complete.

[1] https://riversedgewest.org/sites/default/files/resource-center-documents/Garlon3A_4FAQ.pdf

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APPENDIX A
WETLAND RATING FORMS AND FIGURES

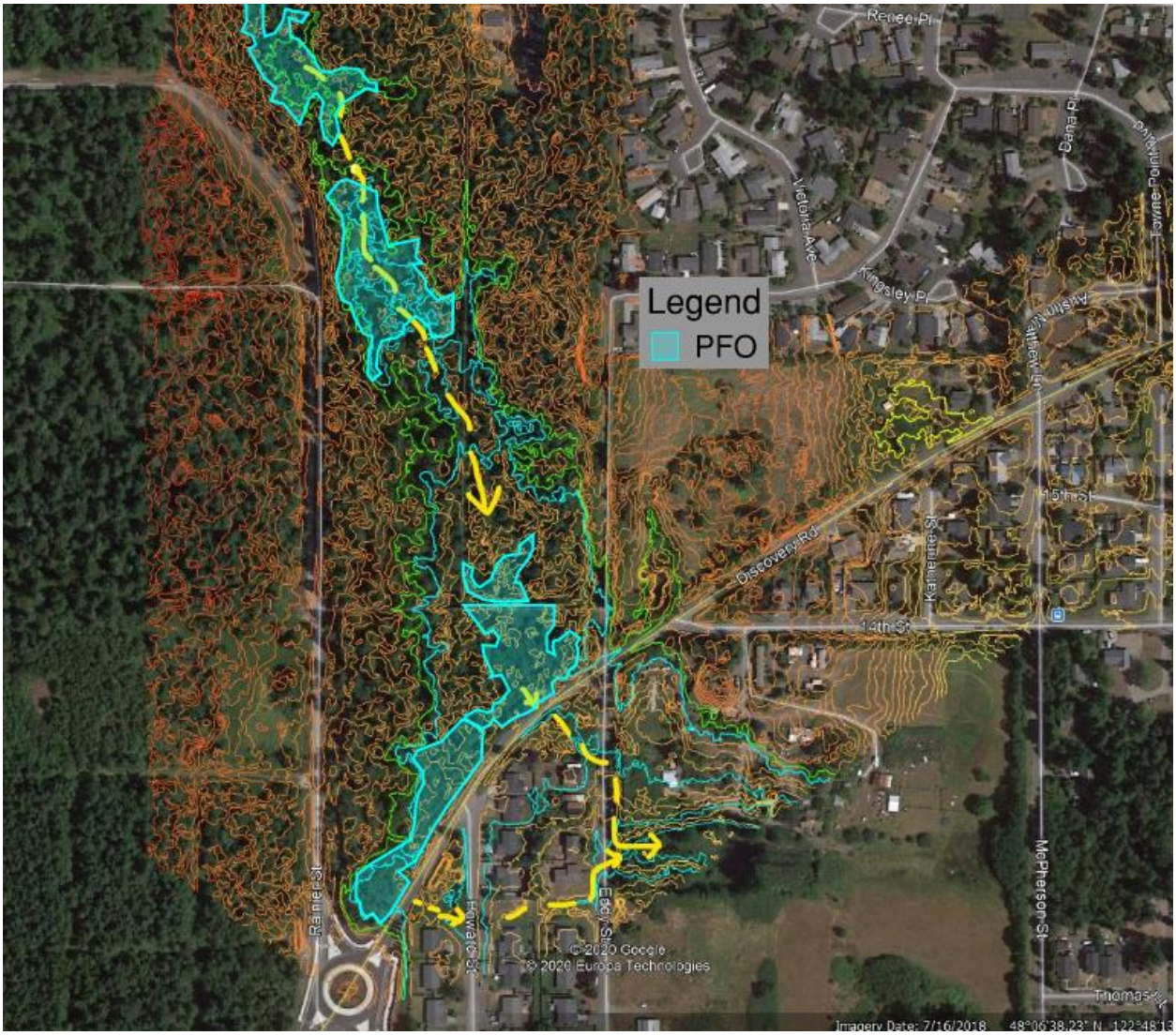


Figure A-10. Cowardin Classes

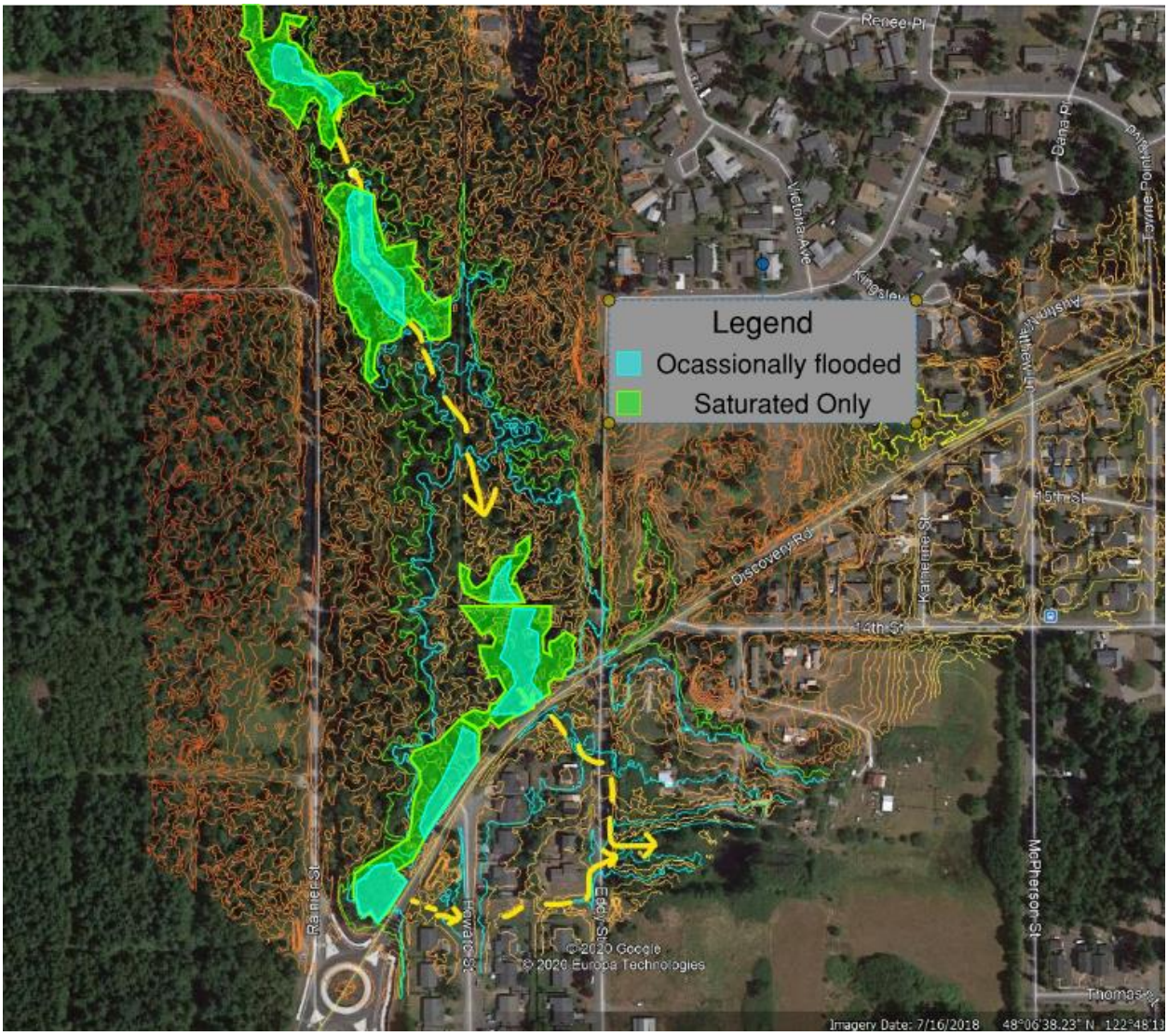


Figure A-11. Hydroperiods and outlet to SE

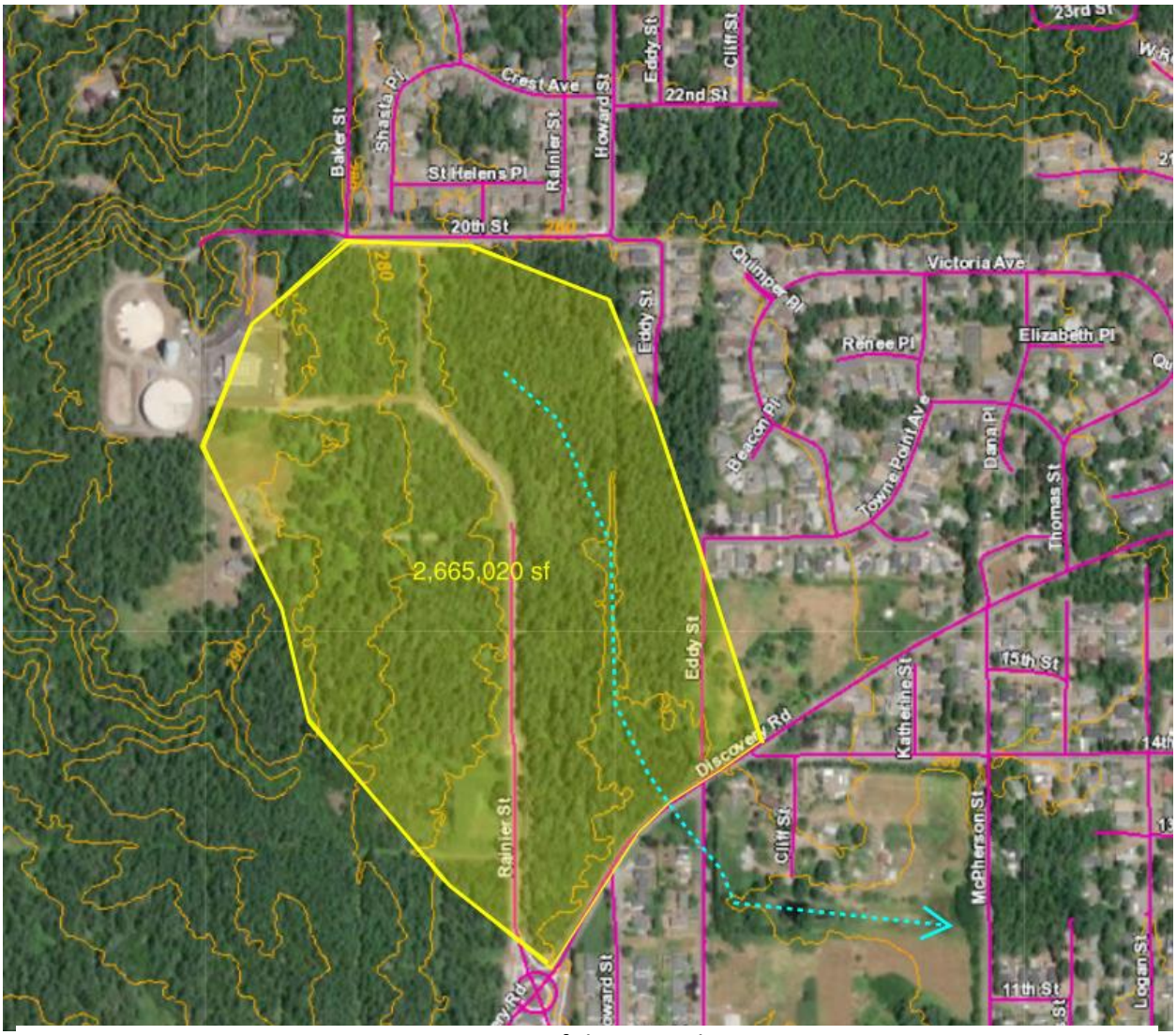


Figure A-12. Map of the Contributing Basin

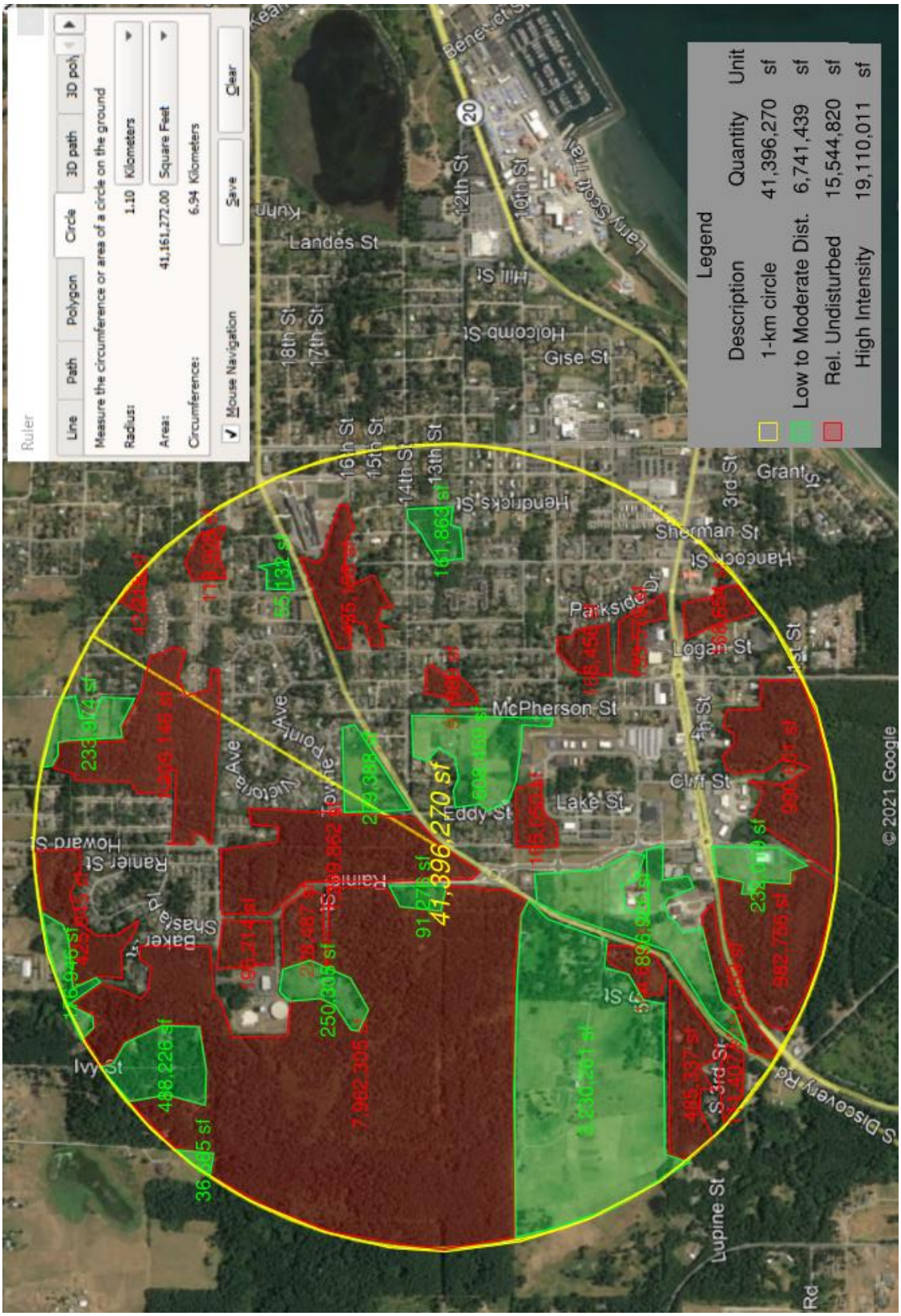


Figure A-13. Showing habitat mapping within 1km of the site

Figure A-14. Project site 303D waters in the basin.

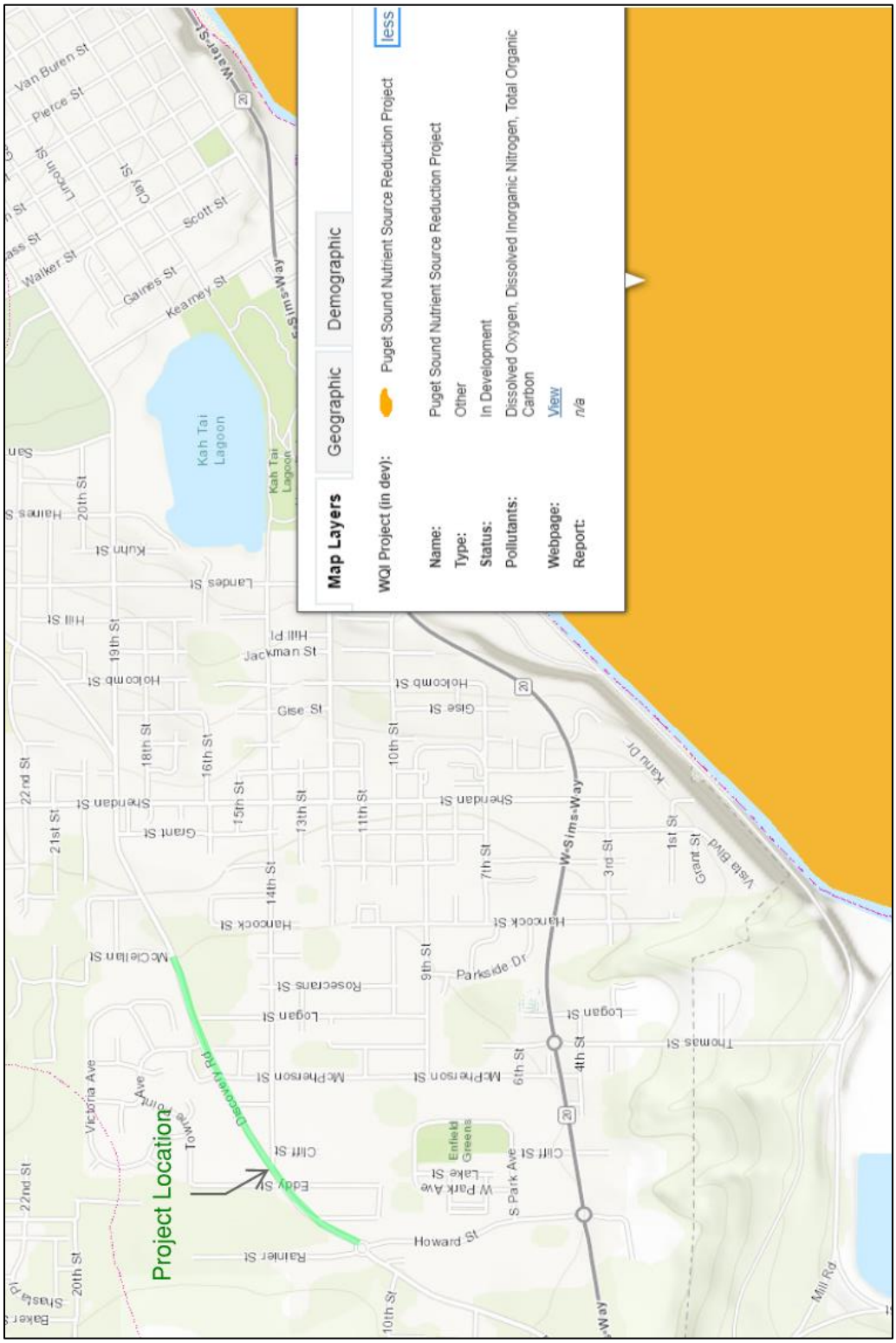


Figure A-15. Water Quality Projects in the Basin

Wetland name or number ODT Discovery Road WL N

RATING SUMMARY – Western Washington

Name of wetland (or ID #): ODT Discovery Road WL N Date of site visit: January 19, 2021

Rated by Lisa Palazzi Trained by Ecology? ☑ Yes ☐ No Date of training 2021

HGM Class used for rating Depressional Wetland has multiple HGM classes? ☐ Y ☑ N

NOTE: **Form is not complete without the figures requested** *(figures can be combined)*.

Source of base aerial photo/map GoogleEarth and Jefferson County GIS

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

1. Category of wetland based on FUNCTIONS

- ☐ **Category I** – Total score = 23 - 27
- XX **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 ☐	**TOTAL**
Score Based on Ratings	5	8	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	**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	xx

Wetland name or number ODT Discovery Road WL N

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	A-10
Hydroperiods	D 1.4, H 1.2	A-11
Location of outlet (*can be added to map of hydroperiods)*	D 1.1, D 4.1	A-11
Boundary of area within 150 ft of the wetland *(can be added to another figure)*	D 2.2, D 5.2	A-11
Map of the contributing basin	D 4.3, D 5.3	A-12
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	A-13
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	A-14
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	A-15

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland *(can be added to another figure)*	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream *(can be added to another figure)*	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R 3.1	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	R 3.2, R 3.3	

Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland *(can be added to another figure)*	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of **dense** trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of **dense, rigid** trees, shrubs, and herbaceous plants (*can be added to figure above)*	S 4.1	
Boundary of 150 ft buffer (can be added to another figure)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number ODT Discovery Road WL N

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 ODT Discovery Road WL N

☑ 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 ODT Discovery Road WL N

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 — **2**

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

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 > $^{1}/_{10}$ of area points = 1 — **5**

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 > ½ total area of wetland points = 4

Area seasonally ponded is > ¼ total area of wetland points = 2 — **2**

Area seasonally ponded is < ¼ total area of wetland points = 0

Total for D 1 — Add the points in the boxes above — **9**

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	1
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	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? 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	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	0
Total for D 3	Add the points in the boxes above	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 ODT Discovery Road WL N

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	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	

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	3
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	

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	3
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	

Total for D 4	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 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	1
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	1
Total for D 5	Add the points in the boxes above	3

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. 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 ☑	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 ☐	

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	2

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

Wetland name or number ODT Discovery Road WL N

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.*

☐ Aquatic bed	4 structures or more: points = 4
☐ Emergent	3 structures: points = 2
☐ Scrub-shrub (areas where shrubs have > 30% cover)	2 structures: points = 1
☑ Forested (areas where trees have > 30% cover)	1 structure: points = 0

If the unit has a Forested class, check if:

☑ 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

1

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*).

☐ Permanently flooded or inundated	4 or more types present: points = 3
☑ Seasonally flooded or inundated	3 types present: points = 2
☑ Occasionally flooded or inundated	2 types present: points = 1
☑ Saturated only	1 type present: points = 0
☐ Permanently flowing stream or river in, or adjacent to, the wetland	
☐ Seasonally flowing stream in, or adjacent to, the wetland	
☐ **Lake Fringe wetland**	**2 points**
☐ **Freshwater tidal wetland**	**2 points**

2

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft^2.

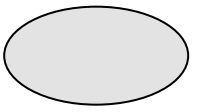
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. ***Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle***

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

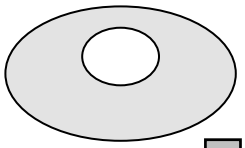
2

H 1.4. Interspersion of habitats

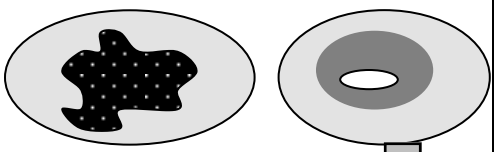
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always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



None = 0 points ☐

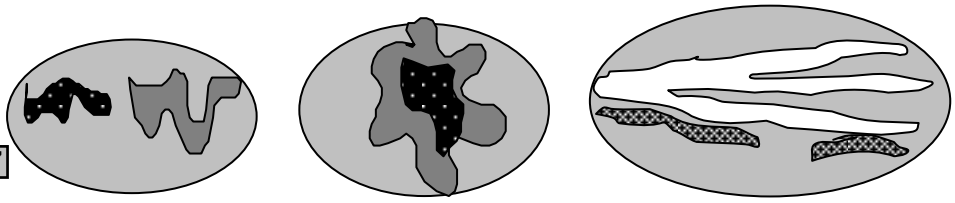


Low = 1 point ☐



Moderate = 2 points ☐

All three diagrams in this row are **HIGH** = 3points ☑



3

Wetland name or number ODT Discovery Road WL N

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 ¼ 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	12

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 functions of the site?

H 2.1. Accessible habitat (include *only habitat that directly abuts wetland unit*). *Calculate:* % undisturbed habitat 3.1 [(% moderate and low intensity land uses)/2] 0.34 3.44 % 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	0
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. *Calculate:* % undisturbed habitat 38 [(% moderate and low intensity land uses)/2] 8.14 46.14 % 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	1
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 1 km Polygon is high intensity points = 0	0
Total for H 2 Add the points in the boxes above	1

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 ☐ Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1 ☐ Site does not meet any of the criteria above points = 0	2

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

Wetland name or number ODT Discovery Road WL N

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 ODT Discovery Road WL N

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type *Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.*	**Category**
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 Yes –Go to **SC 1.1** No= **Not an estuarine wetland**	NA
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? ☐ Yes = **Category I** ☐ No - Go to **SC 1.2**	**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 *Spartina*, 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 un-mowed grassland. ☐ The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. ☐ Yes = **Category I** ☐ No = **Category II**	**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? ☐ Yes – Go to **SC 2.2** ☑ No – Go to **SC 2.3** SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? ☐ Yes = **Category I** ☑ No = **Not a WHCV** 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 ☐ Yes – **Contact WNHP/WDNR and go to SC 2.4** ☑ No = **Not a WHCV** 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? ☐ Yes = **Category I** ☑ No = **Not a WHCV**	**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? *Use the key below.* ***If you answer YES you will still need to rate the wetland based on its functions.*** 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? ☐ Yes – Go to **SC 3.3** ☑ No – Go to **SC 3.2** 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? ☐ Yes – Go to **SC 3.3** ☑ No = **Is not a bog** 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? ☐ Yes = **Is a Category I bog** ☑ No – Go to **SC 3.4** **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. 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? ☐ Yes = **Is a Category I bog** ☑ No = **Is not a bog**	**Cat. I** ☐

Wetland name or number ODT Discovery Road WL N

SC 4.0. Forested Wetlands

Does the wetland have at least 1 contiguous acre of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? ***If you answer YES you will still need to rate the wetland based on its functions.***

☐ **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).

☐ Yes = **Category I** ☑ No = **Not a forested wetland for this section** — ☐ **Cat. I**

SC 5.0. Wetlands in Coastal Lagoons

Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?

☐ 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 *(needs to be measured near the bottom)* — ☐ **Cat. I**

Yes – Go to **SC 5.1** No = **Not a wetland in a coastal lagoon**

SC 5.1. Does the wetland meet all of the following three conditions?

☐ 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). — ☐ **Cat. II**

☐ 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 ft^2)

☐ Yes = **Category I** ☐ No = **Category II**

SC 6.0. Interdunal Wetlands

Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? ***If you answer yes you will still need to rate the wetland based on its habitat functions.***

In practical terms that means the following geographic areas:

☐ Long Beach Peninsula: Lands west of SR 103

☐ Grayland-Westport: Lands west of SR 105 — ☐ **Cat I**

☐ Ocean Shores-Copalis: Lands west of SR 115 and SR 109

☐ Yes – Go to **SC 6.1** ☑ No = **not an interdunal wetland for rating**

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)? — ☐ **Cat. II**

☐ Yes = **Category I** ☐ No – Go to **SC 6.2**

SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger?

☐ Yes = **Category II** ☐ No – Go to **SC 6.3** — ☐ **Cat. III**

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?

☐ Yes = **Category III** ☐ No = **Category IV** — ☐ **Cat. IV**

Category of wetland based on Special Characteristics

If you answered No for all types, enter "Not Applicable" on Summary Form

Wetland name or number ODT Discovery Road WL-S

RATING SUMMARY – Western Washington

Name of wetland (or ID #): ODT Discovery Road WL S Date of site visit: January 19, 2021

Rated by Lisa Palazzi Trained by Ecology? ☑ Yes ☐ No Date of training 2021

HGM Class used for rating Depressional Wetland has multiple HGM classes? ☐ Y ☑ N

NOTE: **Form is not complete without the figures requested** *(figures can be combined)*.

Source of base aerial photo/map GoogleEarth and Jefferson County GIS

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
- XX **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☐	**TOTAL**
Score Based on Ratings	5	7	6	18

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	xx

Wetland name or number ODT Discovery Road WL S

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	A-10
Hydroperiods	D 1.4, H 1.2	A-11
Location of outlet (*can be added to map of hydroperiods)*	D 1.1, D 4.1	A-11
Boundary of area within 150 ft of the wetland *(can be added to another figure)*	D 2.2, D 5.2	A-11
Map of the contributing basin	D 4.3, D 5.3	A-12
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	A-13
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	A-14
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	A-15

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland *(can be added to another figure)*	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream *(can be added to another figure)*	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R 3.1	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	R 3.2, R 3.3	

Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland *(can be added to another figure)*	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of **dense** trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of **dense, rigid** trees, shrubs, and herbaceous plants (*can be added to figure above)*	S 4.1	
Boundary of 150 ft buffer (can be added to another figure)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number ODT Discovery Road WL S

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.

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☑ 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.*

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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 — **2**

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

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 > $^{1}/_{10}$ of area points = 1 — **5**

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 > ½ total area of wetland points = 4

Area seasonally ponded is > ¼ total area of wetland points = 2 — **0**

Area seasonally ponded is < ¼ total area of wetland points = 0

Total for D 1 — 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 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 ☐ — **1**

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 ☑ — **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? — **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 ☑ — **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 ☑ — **0**

Total for D 3 — Add the points in the boxes above — **0**

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

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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	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	

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	3
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	

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	0
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	

Total for D 4	Add the points in the boxes above	5

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 functions of the site?

D 5.1. Does the wetland receive stormwater discharges?	☑ Yes = 1 ☐ No = 0	1
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	1
Total for D 5	Add the points in the boxes above	3

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. 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 ☑	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 ☐	

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	2

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

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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.*

☐	Aquatic bed	4 structures or more: points = 4
☐	Emergent	3 structures: points = 2
☑	Scrub-shrub (areas where shrubs have > 30% cover)	2 structures: points = 1
☐	Forested (areas where trees have > 30% cover)	1 structure: points = 0

If the unit has a Forested class, check if:

☐ 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

0

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*).

☐	Permanently flooded or inundated	4 or more types present: points = 3
☐	Seasonally flooded or inundated	3 types present: points = 2
☑	Occasionally flooded or inundated	2 types present: points = 1
☑	Saturated only	1 type present: points = 0
☐	Permanently flowing stream or river in, or adjacent to, the wetland	
☐	Seasonally flowing stream in, or adjacent to, the wetland	
☐	**Lake Fringe wetland**	**2 points**
☐	**Freshwater tidal wetland**	**2 points**

1

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft^2.

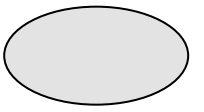
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. ***Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle***

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

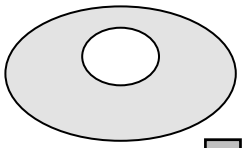
1

H 1.4. Interspersion of habitats

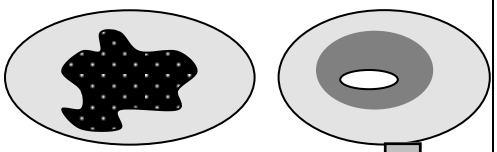
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always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



None = 0 points ☑



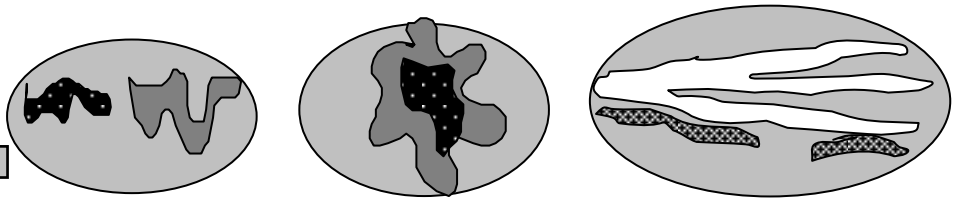
Low = 1 point ☐



Moderate = 2 points ☐

0

All three diagrams in this row are **HIGH** = 3points ☐



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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 ¼ 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)*
- [x] 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: 3

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?

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

Calculate: % undisturbed habitat 3.1 [(% moderate and low intensity land uses)/2] 0.34 _ 3.44 %

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

0

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

Calculate: % undisturbed habitat 38 [(% moderate and low intensity land uses)/2] 8.14 _ 46.14 %

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

1

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 1 km Polygon is high intensity	points = 0

0

Total for H 2 — Add the points in the boxes above: 1

Rating of Landscape Potential If score is: [ ] **4-6 = H** [x] **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

- [x] 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) within 100 m — points = 1
- [ ] Site does not meet any of the criteria above — points = 0

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

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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.

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CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type *Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.*	**Category**
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 Yes –Go to **SC 1.1** No= **Not an estuarine wetland**	NA
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? ☐ Yes = **Category I** ☐ No - Go to **SC 1.2**	**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 *Spartina*, 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 un-mowed grassland. ☐ The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. ☐ Yes = **Category I** ☐ No = **Category II**	**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? ☐ Yes – Go to **SC 2.2** ☑ No – Go to **SC 2.3** SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? ☐ Yes = **Category I** ☑ No = **Not a WHCV** 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 ☐ Yes – **Contact WNHP/WDNR and go to SC 2.4** ☑ No = **Not a WHCV** 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? ☐ Yes = **Category I** ☑ No = **Not a WHCV**	**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? *Use the key below.* ***If you answer YES you will still need to rate the wetland based on its functions.*** 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? ☐ Yes – Go to **SC 3.3** ☑ No – Go to **SC 3.2** 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? ☐ Yes – Go to **SC 3.3** ☑ No = **Is not a bog** 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? ☐ Yes = **Is a Category I bog** ☑ No – Go to **SC 3.4** **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. 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? ☐ Yes = **Is a Category I bog** ☑ No = **Is not a bog**	**Cat. I** ☐

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SC 4.0. Forested Wetlands

Does the wetland have at least 1 contiguous acre of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? ***If you answer YES you will still need to rate the wetland based on its functions.***

☐ **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).

☐ Yes = **Category I** ☑ No = **Not a forested wetland for this section** — ☐ **Cat. I**

SC 5.0. Wetlands in Coastal Lagoons

Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?

☐ 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 *(needs to be measured near the bottom)* — ☐ **Cat. I**

Yes – Go to **SC 5.1** No = **Not a wetland in a coastal lagoon**

SC 5.1. Does the wetland meet all of the following three conditions?

☐ 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). — ☐ **Cat. II**

☐ 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 ft^2)

☐ Yes = **Category I** ☐ No = **Category II**

SC 6.0. Interdunal Wetlands

Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? ***If you answer yes you will still need to rate the wetland based on its habitat functions.***

In practical terms that means the following geographic areas:

☐ Long Beach Peninsula: Lands west of SR 103

☐ Grayland-Westport: Lands west of SR 105 — ☐ **Cat I**

☐ Ocean Shores-Copalis: Lands west of SR 115 and SR 109

☐ Yes – Go to **SC 6.1** ☑ No = **not an interdunal wetland for rating**

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)? — ☐ **Cat. II**

☐ Yes = **Category I** ☐ No – Go to **SC 6.2**

SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger?

☐ Yes = **Category II** ☐ No – Go to **SC 6.3** — ☐ **Cat. III**

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?

☐ Yes = **Category III** ☐ No = **Category IV** — ☐ **Cat. IV**

Category of wetland based on Special Characteristics

If you answered No for all types, enter "Not Applicable" on Summary Form

APPENDIX B
WETLAND FIELD DATA FORMS

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

Project/Site: Discovery Road WL-N City/County: Jefferson Sampling Date: 1/19/2021

Applicant/Owner: City of Port Townsend State: WA Sampling Point: D-1

Investigator(s): Lisa Palazzi and Hans Shepherd Section, Township, Range: Township 30 N, Range 01W, Sections 9 & 10

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-3%

Subregion (LRR): WMVC Lat: Lat. 48.1078 Long: Long. -122.8063 Datum:

Soil Map Unit Name: Clallam NWI classification: PFO

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes XX 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 XX No _____	**Is the Sampled Area within a Wetland?** Yes XX No _____
Hydric Soil Present?	Yes XX No _____	
Wetland Hydrology Present?	Yes XX No _____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pacific willow (Salix lasiandra)	40	Y (50)	FACW
2. Oregon ash (Fraxinus latifolia)	40	Y (50)	FACW
3.			
4.			
	80	= Total Cover	
Sapling/Shrub Stratum (Plot size: 30ft)			
1. Sitka willow (Salix sitchensis)	35	Y (35)	FACW
2. Nootka rosa (Rosa nutkana)	25	Y (25)	FAC
3. Spirea (Spiraea douglasii)	40	Y (40)	FACW
4.			
5.			
	100	= Total Cover	
Herb Stratum (Plot size: 10ft)			
1. Slough sedge (Carex obnupta)	50	Y (77)	OBL
2. Sedge spp (unidentified)	15	Y (23)	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	65	= Total Cover	
Woody Vine Stratum (Plot size: 10ft)			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 88% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	77	x 1 =	77
FACW species	198	x 2 =	396
FAC species	25	x 3 =	75
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	300 (A)		548 (B)

Prevalence Index = B/A = 1.82

Hydrophytic Vegetation Indicators:

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

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

Hydrophytic Vegetation Present? Yes XX No _____

Remarks:

SOIL

Sampling Point: WL D-1(WL)

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR3/2		10YR5/6	35	C	M	L	15% gravel content

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes XX No _____

Remarks:

Dark surface soil with redox concentrations; HS odor

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

Surface Water Present? Yes XX No _____ Depth (inches): 1"

Water Table Present? Yes XX No _____ Depth (inches): 1"

Saturation Present? (includes capillary fringe) Yes XX No _____ Depth (inches): 1"

Wetland Hydrology Present? Yes XX No _____

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

Remarks:

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

Project/Site: Discovery Road WL-N City/County: Jefferson Sampling Date: 1/19/2021

Applicant/Owner: City of Port Townsend State: WA Sampling Point: D-1 (UL)

Investigator(s): Lisa Palazzi and Hans Shepherd Section, Township, Range: Township 30 N, Range 01W, Sections 9 & 10

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-3%

Subregion (LRR): WMVC Lat: Lat. 48.1078 Long: Long. -122.8063 Datum:

Soil Map Unit Name: Clallam NWI classification: PFO

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes XX 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 XX No _____	**Is the Sampled Area within a Wetland?** Yes _____ No XX
Hydric Soil Present?	Yes _____ No XX	
Wetland Hydrology Present?	Yes _____ No XX	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pacific willow (Salix lasiandra)	40	Y (73)	FACW
2. Douglas-fir (Pseudotsuga menziesii)	15	Y (27)	FACU
3.			
4.			
	55	= Total Cover	
Sapling/Shrub Stratum (Plot size: 30ft)			
1. Sitka willow (Salix sitchensis)	40	Y (29)	FACW
2. Nootka rosa (Rosa nutkana)	20	N (15)	FAC
3. Snowberry (Symphoricarpos albis)	15	N (11)	FACU
4. Salal (Gaultheria Shallon)	60	Y (44)	FACU
5.			
	135	= Total Cover	
Herb Stratum (Plot size: 10ft)			
1. Bracken fern (Pteridium aquilinum)	10	N (14)	FACU
2. Pasture grasses	60	Y (86)	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	70	= Total Cover	
Woody Vine Stratum (Plot size: 10ft)			
1. Himalayan blackberry	15	Y (100)	FAC
2.			
	15	= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 6 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	102	x 2 =	204
FAC species	301	x 3 =	903
FACU species	96	x 4 =	384
UPL species	0	x 5 =	0
Column Totals:	499 (A)		1491 (B)

Prevalence Index = B/A = 2.98

Hydrophytic Vegetation Indicators:

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

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

Hydrophytic Vegetation Present? Yes XX No _____

Remarks:

Elevation differences are minor, tendency to have both wetland and upland species.

SOIL

Sampling Point: WL D-1(UL)

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	10YR2/2		no redox				GrSL	15% gravel content
9-16	10YR4/3		10YR4/6	10	C	M	GrSL	15% gravel content

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

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

Remarks:

No chroma 2 or less within 16 inches of the surface

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): >16"

Water Table Present? Yes _____ No X Depth (inches): >16"

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): >16"

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

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

Remarks:

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

Project/Site: Discovery Road WL-S City/County: Jefferson Sampling Date: 1/19/2021

Applicant/Owner: City of Port Townsend State: WA Sampling Point: S-1

Investigator(s): Lisa Palazzi and Hans Shepherd Section, Township, Range: Township 30 N, Range 01W, Sections 9 & 10

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-3%

Subregion (LRR): WMVC Lat: Lat. 48.1078 Long: Long. -122.8063 Datum:

Soil Map Unit Name: Clallam NWI classification: PFO

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes XX 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 XX No _____	**Is the Sampled Area within a Wetland?** Yes XX No _____
Hydric Soil Present?	Yes XX No _____	
Wetland Hydrology Present?	Yes XX No _____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 30ft)			
1. Snowberry (Symphoricarpus albus)	10	N	FACU
2. Nootka rosa (Rosa nutkana)	90	Y	FAC
3. Spirea (Spiraea douglasii)	20	N	FACW
4.			
5.			
	120 = Total Cover		
Herb Stratum (Plot size: 10ft)			
1. Creeping buttercup (Ranunculus repens)	20	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	20 = Total Cover		
Woody Vine Stratum (Plot size: 10ft)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species 40	x 2 = 80
FAC species 90	x 3 = 270
FACU species 10	x 4 = 40
UPL species 0	x 5 = 0
Column Totals: 140 (A)	390 (B)

Prevalence Index = B/A = 2.78

Hydrophytic Vegetation Indicators:

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

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

Hydrophytic Vegetation Present? Yes XX No _____

Remarks:

SOIL

Sampling Point: WL S-1(WL)

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-14	10YR2/2		10YR4/6	25	C	M	L	10% gravel content

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes XX No _____

Remarks:

Dark surface soil with redox concentrations; HS odor

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

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

Water Table Present? Yes XX No _____ Depth (inches): 4"

Saturation Present? (includes capillary fringe) Yes XX No _____ Depth (inches): 4"

Wetland Hydrology Present? Yes XX No _____

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

Remarks:

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

Project/Site: Discovery Road WL-S City/County: Jefferson Sampling Date: 1/19/2021

Applicant/Owner: City of Port Townsend State: WA Sampling Point: S-1 (UL)

Investigator(s): Lisa Palazzi and Hans Shepherd Section, Township, Range: Township 30 N, Range 01W, Sections 9 & 10

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-3%

Subregion (LRR): WMVC Lat: Lat. 48.1078 Long: Long. -122.8063 Datum:

Soil Map Unit Name: Clallam NWI classification: PFO

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes XX 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 XX No _____	**Is the Sampled Area within a Wetland?** Yes XX No _____
Hydric Soil Present?	Yes _____ No XX	
Wetland Hydrology Present?	Yes _____ No XX	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 30ft)			
1. Snowberry (Symphoricarpus albus)	40	Y	FACU
2. Nootka rosa (Rosa nutkana)	90	Y	FAC
3.			
4.			
5.			
	130 = Total Cover		
Herb Stratum (Plot size: 10ft)			
1. Creeping buttercup (Ranunculus repens)	15	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	20 = Total Cover		
Woody Vine Stratum (Plot size: 10ft)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species 15	x 2 = 30
FAC species 90	x 3 = 270
FACU species 40	x 4 = 160
UPL species 0	x 5 = 0
Column Totals: 145 (A)	460 (B)

Prevalence Index = B/A = 3.17

Hydrophytic Vegetation Indicators:

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

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

Hydrophytic Vegetation Present? Yes XX No _____

Remarks:
Meets Dominance Test, but not Prevalence Test

SOIL

Sampling Point: WL S-1(UL)

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	10YR3/3		no redox				GrSL	25% gravel content
9-14	10YR4/3		10YR4/6	2	C	M	GrSL	25% gravel content

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No XX

Remarks:

No chroma 2 or less within 14 inches of the surface

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): >14"

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

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): >14"

Wetland Hydrology Present? Yes _____ No XX

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

Remarks:

SCJ ALLIANCE
CONSULTING SERVICES

Hazardous Materials Technical Memo

Discovery Road Bikeway and Sidewalks Project

Federal Aid Number: 7627(001)

Sections 9 and 10, Township 30 North, Range 1 West

The purpose of this memorandum is to provide additional information on the potential hazardous material (hazmat) sites in the vicinity of the Discovery Road Bikeway and Sidewalks Project (Project), as well as to analyze the potential risk for such materials from these sites to cause contamination or be encountered during the proposed project. It includes a recent search of the Washington State Department of Ecology's (Ecology) facility/site database, review of other technical analyses prepared in the vicinity, and the results of a pedestrian survey of the project site. This memorandum is intended to supplement the information in the National Environmental Policy Act (NEPA) Categorical Exclusion Documentation Form prepared for the project and has been right-sized commensurate with the expected impacts (40 CFR 1502.2).

Project Description

The City of Port Townsend's (City) Project proposes to reconstruct the roadway and add curbs, enhanced crosswalks, stormwater drainage and treatment, lighting, and intersection improvements on Discovery Road, from Rainier Street to McClellan Street. On the north side of Discovery Road, the Project will provide sidewalk and curb ramps. The City received a Ped/Bike Grant from WSDOT and federal funds from Jefferson County to construct a two-way bikeway, sidewalk, curb ramps, pedestrian activated flashing beacons, drainage, and pavement marking improvements on the south side of Discovery Road to improve non-motorized safety. The TIB grant will allow for much needed roadway improvements such as minor roadway realignment to create a complete street project. The Project will be constructed within the existing right-of-way; no temporary or permanent right-of-way is required.

Site Description

The Project will add sidewalks and bike lanes designed to improve safety along this busy corridor. The current two-lane road surface has only a minimal shoulder, making walking or biking hazardous. Land use in the Project area is a mix of Single-Family Residential and Multi-Family Residential. Grant Street Elementary School is sited at the northeast end of the project; therefore, this corridor also serves a large population of elementary school students.

The Project area is in Port Townsend, in Sections 9 and 10, Township 30N, Range 01W. The Project area extends along Discovery Road from the Rainer Street roundabout (approx. 260 ft elevation) northeast to McClellan

Street (approx. 229 ft elevation). Latitude/ Longitude coordinates for the northeast and southwest ends of the project area are:

- 48.279069 Lat., -122.7958 Long. (McClellan)
- 48.108206 Lat., -122.806061 Long. (Rainer RAB)

The ROW area is mostly grassed with minor inclusions of shrubby vegetation in upland as well as in wetland areas, but the majority of the large adjacent wetland outside of the ROW to the northwest is a Palustrine Forested system, and the small wetland swale area southeast of the roadway is Palustrine Scrub-Shrub.

A geotechnical study has not been performed for the proposed Project; however, a study was prepared for a different project at the west end of the Project alignment (Landau Associates, 2009). That report was reviewed for potential similar subsurface and groundwater conditions in the area. Subsurface borings completed for the 2009 study, ranging from 15.5 feet to 31.5 feet below the existing ground surface, showed no evidence of contaminated soils. The borings did not encounter groundwater, though it should be noted that conditions at that location may not be indicative of conditions along the entire Project alignment due to local subsurface conditions, weather, and other factors.

Regulatory Database Review

SCJ staff performed a pedestrian survey of the site to identify visible signs of potential hazardous materials within the project footprint. No evidence of hazardous materials was found. In addition, SCJ reviewed the Washington State Department of Ecology's (Ecology) *Confirmed and Suspected Contaminated Sites List* to identify hazardous materials cleanup sites within 0.5-mile of the Project limits (study area). This included sites with reported underground storage tanks, leaking underground storage tanks, voluntary cleanup program sites, and state cleanup sites.

One site was identified as awaiting cleanup – the Hastings Accident Site located at 2700 Hastings Avenue (Figure 1). One other site was identified within the study area, the 2400-2500 Sims Way Right-of-Way, which has a status of No Further Action. As such, that site is not discussed further in this analysis.

Hastings Accident Site

The information in this section is summarized from Ecology's Cleanup Site Details and Initial Investigation Field Report and the Early Notice Letter (Appendix A). The Hastings Accident Site contamination is a result of an auto accident at the intersection of Hastings Avenue and Ivy Road. The accident resulted in a dump truck losing up to 50 gallons of diesel fuel, hydraulic fluid, and coolant directly onto the roadway and into an adjacent ditch filled with water. Immediate spill cleanup was performed by the City of Port Townsend. According to the Initial investigation Field Report, site soils are listed as "Suspected" for petroleum diesel and gasoline contamination. The Early Notice Letter, from Ecology to the City of Port Townsend, states that the initial investigation both soil and groundwater was found to be contaminated with diesel petroleum and other substances above MTCA cleanup levels.

One item to note is that the Ecology database maps this site as a point approximately 0.4-miles south of the location described in the Initial Investigation Field Report, within the Project study area. The intersection is

approximately 0.8-miles from the Project Site. For the purposes of evaluating the worst-case scenario, the site has been included in this technical memorandum.

The Hastings Accident contamination was a result of a single accident that went through partial cleanup. Remaining contamination in the soils and groundwater is not likely to have migrated far from the source site. The Project site is at least 0.5-mile from the suspected contamination.

No hazardous materials impacts are anticipated from nearby contamination.

Inadvertent Discovery of Hazardous Materials

Clearing and grading will be a part of the road reconstruction and installation of the sidewalks and bike facilities. Ground disturbing activities and estimated excavation depths are as follows:

- Roadway reconstruction: 2 feet
- Stormwater facilities (pipes, catch basins, and treatment facilities): Up to 6 feet
- Illumination foundations: 6 feet
- Sign foundations: 3 feet
- Small retaining walls: 4 feet

The Project has some potential to encounter previously unknown contamination during construction due to the developed nature of the site. If potentially contaminated materials are encountered, the City would appropriately identify, characterize, handle, and dispose of contaminated soil and/or groundwater encountered during construction activities in accordance with state and federal regulations.

During construction, relatively small quantities of fuels (including diesel, gasoline, and propane) for various pieces of small equipment would likely be stored at onsite. Other construction related materials likely at each project component would include solvents and adhesives used in relatively small quantities.

During construction, all potentially hazardous construction materials used would be handled and stored in accordance with state and federal hazardous materials handling requirements. If unanticipated soil and/or groundwater contamination is encountered during construction activities, remediation of those materials would occur as needed. In compliance with the Model Toxics Control Act Cleanup Regulation (Washington Administrative Code (WAC) 173 340), a cleanup plan would be developed and implemented to minimize human exposure and for the proper removal and treatment or disposal of contaminated materials in soils or groundwater. This elimination of hazardous or contaminated materials would reduce future potential adverse effects to human health and the environment from exposure at those locations or from potential migration.

After construction, the Project would not store, use, or generate hazardous materials during operations.

No impacts are anticipated as a result of construction or operation of the Project.

Conclusion

Based on the best professional judgement of the City of Port Townsend, this memorandum documents the appropriate level of investigation necessary to identify potentially contaminated sites that may affect the environment, create construction impacts, and/or incur potential cleanup liability. There are no significant adverse effects anticipated for this project.

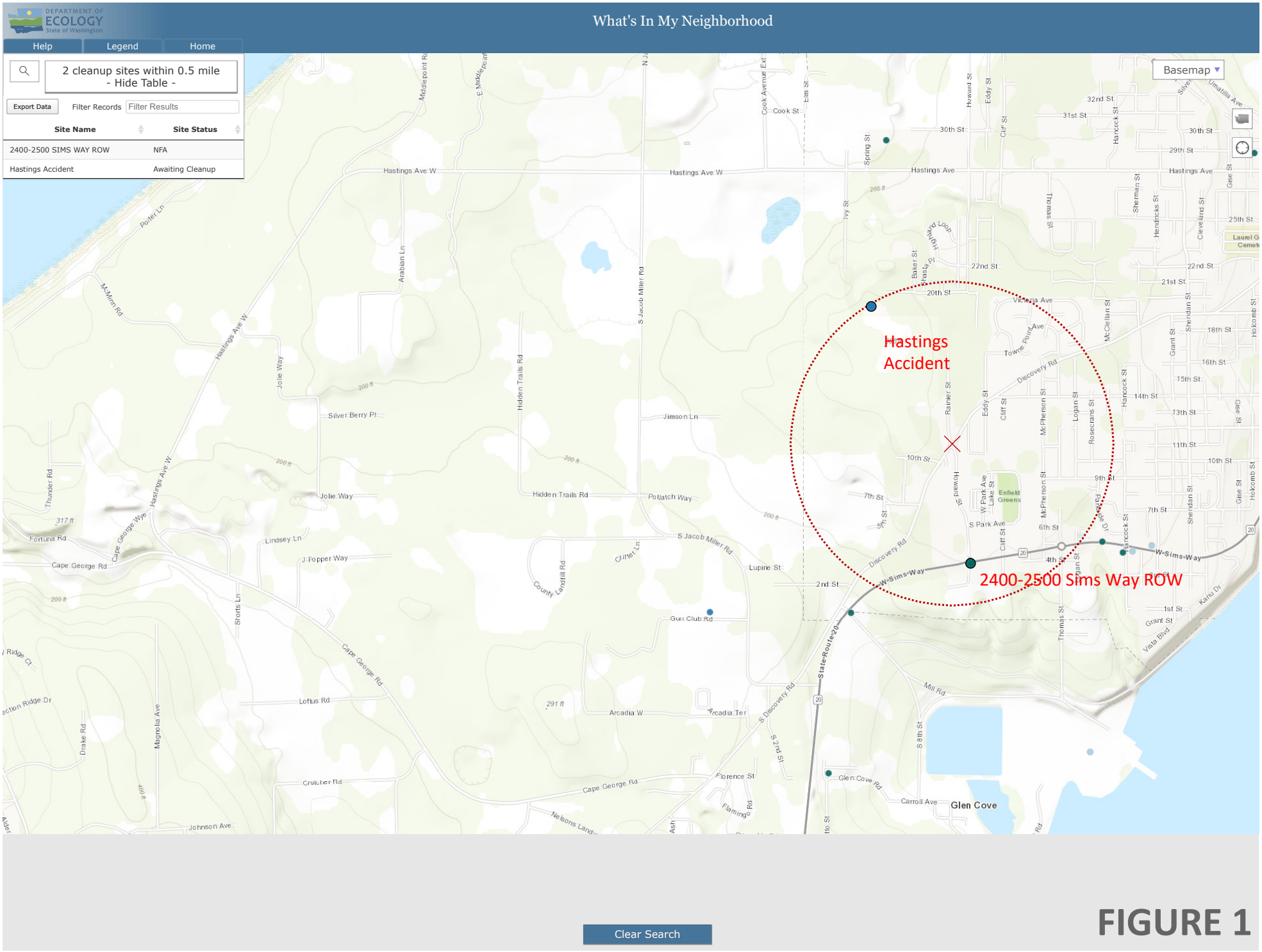

DEPARTMENT OF ECOLOGY State of Washington
What's In My Neighborhood
Help
Legend
Home
2 cleanup sites within 0.5 mile
- Hide Table -
Export Data
Filter Records
Filter Results
Site Name
Site Status
2400-2500 SIMS WAY ROW
NFA
Hastings Accident
Awaiting Cleanup
Basemap
Hastings Accident
2400-2500 Sims Way ROW
Clear Search

FIGURE 1

WASHINGTON STATE DEPARTMENT OF ECOLOGY

INITIAL INVESTIGATION FIELD REPORT

ERTS Number: 670740
Parcel #(s): 000000210
COUNTY: Jefferson

SITE INFORMATION

Site Name (e.g., Co. name over door):	Site Address (including City and Zip+4):	Site Phone:
Hastings @ Ivy Accident	2700 Hastings Ave. Intersection of Hastings and Ivy Port Townsend, WA 98368	n/a
Site Contact and Title:	Site Contact Address (including City and Zip+4): City of Port Townsend Public Works 250 Madison St #2R, Port Townsend, WA 98368	Site Contact Phone: (360) 385-7212
Site Owner: Chris Torgenson	Site Owner Address (including City and Zip+4): Liberty Mutual Insurance	Site Owner Phone: 503-736-8315
Site Owner Contact:	Site Owner Contact Address (including City and Zip+4):	Owner Contact Phone:
Alternate Site Name(s):	Comments:	
Previous Site Owner(s):	Comments:	

Latitude (Decimal Degrees): 48.11
Longitude (Decimal Degrees): -122.81

INSPECTION INFORMATION

Inspection Conducted? Yes ☐ No ☒	Date/Time:	Entry Notice: Announced ☐	Unannounced ☐
Photographs taken?	Yes ☐	No ☒	
Samples collected?	Yes ☐	No ☒	If *Yes*, be sure to include a figure/sketch showing sample locations.

RECOMMENDATION

No Further Action (Check appropriate box below):		**LIST on Confirmed and Suspected Contaminated Sites List:** ☒
Release or threatened release does not pose a threat	☐	
No release or threatened release	☐	
Refer to program/agency (Name:_____)	☐	
Independent Cleanup Action Completed (i.e., contamination removed)	☐	

COMPLAINT (Brief Summary of ERTS Complaint):
Dump Truck vs. Pick-up truck accident on Hastings at intersection with Ivy rd. Dump truck possibly lost up to 50 gallons of diesel fuel hydraulic fluid, and coolant. Direct discharge onto roadway and adjacent ditch filled with water.

CURRENT SITE STATUS (Brief Summary of why Site is recommended for Listing or NFA):

After immediate spill cleanup actions by City of Port Townsend Public Works staff, no other work has been performed to test and remove contaminated soil along Hastings Rd. Due to the amount of fluid lost and the location of the crash site, suspected diesel and coolant contaminated soil exists.

Investigator:		Date Submitted:
Roger Parker, CHES, CPO	Roger Parker	3 May 2017

OBSERVATIONS

Description (please be sure to include the following: site observations, site features and cover, chronology of events, sources/past practices likely responsible for contamination, presence of water supply wells and other potential exposure pathways, etc.):

2/15/2017 12:00 JCPH received ERTS from Ecology. At approximately 4:25 pm on Tuesday, February 14th, a pickup truck crashed into a dump truck while trying to pass a third vehicle. The dump truck suffered a ruptured fuel tank and was leaking hydraulic fluid. According to the news article, a hazardous materials cleanup response was indicated.

2/15/2017 13:10 JCPH Staff Roger Parker called PT Public works about response to spill. Accident was in the city of Port Townsend area of responsibility. According to PT Public Works, there was only a small amount of diesel spilled along the roadway, with no impact to soils along the side of the road. Sand and absorbent were used, disposed of at the Jefferson County Transfer Station as necessary. Cleanup of the site is the responsibility of the trucking company and their insurance.

2/21/2017 Washington State Department of Ecology Spills coordinator Shawn Zaniewski called and discussed current status of the clean-up of the crash site. Seton construction and Liberty Mutual are responsible for the testing and cleanup. Ecy. Spills sent Liberty Mutual the list of vetted contactors that will get the site tested and cleaned.

3/2/2017 Contacted insurance company about the status of the testing and clean-up of the spilled materials. No work has been done at the site as yet. Liberty Mutual insurance claim # W0945426. Contacted Seton construction, owner on vacation until the 10th of March. Seton construction is responsible for the hiring of an environmental firm to do the cleanup.

3/14/2017 Contacted Seton construction. Owner unavailable at the moment, will call back this afternoon.

3/23/2017 Contacted Seton construction. Owner unavailable at the moment, will call back this afternoon.

4/3/2017 Contacted Seton construction. Owner unavailable at the moment, will call back this afternoon.

4/19/2017 Contacted City of Port Townsend Public Works about their responsibility as the landowner for the cleanup of the contamination. Explained that the responsible party was not returning phone calls and nothing has been sampled or tested to determine the amount of contamination at the crash site.

5/3/2017 Completed paperwork and contacted Ecology about Listing the Site.

(fill in contaminant matrix below with appropriate status choice from the key below the table)

CONTAMINANT GROUP	CONTAMINANT	SOIL	GROUNDWATER	SURFACE WATER	AIR	BEDROCK	DESCRIPTION
Non-Halogenated Organics	Phenolic Compounds						Compounds containing phenols (Examples: phenol; 4-methylphenol; 2-methylphenol)
	Non-Halogenated Solvents						Organic solvents, typically volatile or semi-volatile, not containing any halogens. To determine if a product has halogens, search HSDB (http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB) and look at the Chemical/Physical Properties, and Molecular Formula. If there is not a Cl, I, Br, F in the formula, it's not halogenated. (Examples: acetone, benzene, toluene, xylenes, methyl ethyl ketone, ethyl acetate, methanol, ethanol, isopropranol, formic acid, acetic acid, stoddard solvent, Naptha). *Use this when TEX contaminants are present independently of gasoline.*
	Polynuclear Aromatic Hydrocarbons (PAH)						Hydrocarbons composed of two or more benzene rings.
	Tributyltin						The main active ingredients in biocides used to control a broad spectrum of organisms. Found in antifouling marine paint, antifungal action in textiles and industrial water systems. (Examples: Tributyltin; monobutyltin; dibutyltin)
	Methyl tertiary-butyl ether						MTBE is a volatile oxygen-containing organic compound that was formerly used as a gasoline additive to promote complete combustion and help reduce air pollution.
	Benzene						Benzene
	Other Non-Halogenated Organics						Other Non-Halogenated Organics (Example: Phthalates)
	Petroleum Diesel	S					Petroleum Diesel
	Petroleum Gasoline	S					Petroleum Gasoline
	Petroleum Other						Crude oil and any fraction thereof. Petroleum products that are not specifically Gasoline or Diesel.
Halogenated Organics (see notes at bottom)	PBDE						Polybrominated di-phenyl ether
	Other Halogenated Organics						Other organic compounds with halogens (chlorine, fluorine, bromine, iodine). search HSDB (http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB) and look at the Chemical/Physical Properties, and Molecular Formula. If there is a Cl, I, Br, F in the formula, it is halogenated. (Examples: Hexachlorobutadiene; hexachlorobenzene; pentachlorophenol)
	Halogenated solvents						Solvents containing halogens (Halogen is typically chlorine, but can also be fluorine, bromine, iodine), and their breakdown products (Examples: Trichloroethylene; Tetrachloroethylene (aka Perchloroethylene); TCE; TCA; trans and cis 1,2 dichloroethylene; vinyl chloride)
	Polychlorinated Biphenyls (PCB)						Any of a family of industrial compounds produced by chlorination of biphenyl, noted primarily as an environmental pollutant that accumulates in animal tissue with resultant pathogenic and teratogenic effects
	Dioxin/dibenzofuran compounds (see notes at bottom)						A family of more than 70 compounds of chlorinated dioxins or furans. (Examples: Dioxin; Furan; Dioxin TEQ; PCDD; PCDF; TCDD; TCDF; OCDD; OCDF). *Do not use for 'dibenzofuran', which is a non-chlorinated compound that is detected using the semivolatile organics analysis 8270*
Metals	Metals - Other						Metals other than arsenic, lead, or mercury. (Examples: cadmium, antimony, zinc, copper, silver)
	Lead						Lead
	Mercury						Mercury
	Arsenic						Arsenic
Pesticides	Non-halogenated pesticides						Pesticides without halogens (Examples: parathion, malathion, diazinon, phosmet, carbaryl (sevin), fenoxycarb, aldicarb)
	Halogenated pesticides						Pesticides with halogens (Examples: DDT; DDE; Chlordane; Heptachlor; alpha-beta and delta BHC; Aldrin; Endosulfan, dieldrin, endrin)
Other Contaminants	Radioactive Wastes						Wastes that emit more than background levels of radiation.

CONTAMINANT GROUP	CONTAMINANT	SOIL	GROUNDWATER	SURFACE WATER	AIR	BEDROCK	DESCRIPTION
	Conventional Contaminants, Organic	S					Unspecified organic matter that imposes an oxygen demand during its decomposition (Example: Total Organic Carbon)
	Conventional Contaminants, Inorganic						Non-metallic inorganic substances or indicator parameters that may indicate the existence of contamination if present at unusual levels (Examples: Sulfides, ammonia)
	Asbestos						All forms of Asbestos. Asbestos fibers have been used in products such as building materials, friction products and heat-resistant materials.
	Other Deleterious Substances						Other contaminants or substances that cause subtle or unexpected harm to sediments (Examples: Wood debris; garbage (e.g., dumped in sediments))
	Benthic Failures						Failures of the benthic analysis standards from the Sediment Management Standards.
	Bioassay Failures						For sediments, a failure to meet bioassay criteria from the Sediment Management Standards. For soils, a failure to meet TEE bioassay criteria for plant, animal or soil biota toxicity.
Reactive Wastes	Unexploded Ordinance						Weapons that failed to detonate or discarded shells containing volatile material.
	Other Reactive Wastes						Other Reactive Wastes (Examples: phosphorous, lithium metal, sodium metal)
	Corrosive Wastes						Corrosive wastes are acidic or alkaline (basic) wastes that can readily corrode or dissolve materials they come into contact with. Wastes that are highly corrosive as defined by the Dangerous Waste Regulation (WAC 173-303-090(6)). (Examples: Hydrochloric acid; sulfuric acid; caustic soda)

Status choices for contaminants	
Contaminant Status	**Definition**
B - Below Cleanup Levels (Confirmed)	The contaminant was tested and found to be below cleanup levels. (Generally, we would not enter each and every contaminant that was tested; for example if an SVOC analysis was done we would not enter each SVOC with a status of "below". We would use this for contaminants that were believed likely to be present but were found to be below standards when tested
S - Suspected	The contaminant is suspected to be present; based on some knowledge about the history of the site, knowledge of regional contaminants, or based on other contaminants known to be present
C - Confirmed Above Cleanup Levels	The contaminant is confirmed to be present above any cleanup level. For example - above MTCA method A, B, or C; above Sediment Quality Standards; or above a presumed site-specific cleanup level (such as human health criteria for a sediment contaminant).
RA - Remediated - Above	The contaminant was remediated, but remains on site above the cleanup standards (for example - capped area).
RB - Remediated - Below	The contaminant was remediated, and no area of the site contains this contaminant above cleanup standards (for example - complete removal of contaminated soils).

Halogenated chemicals and solvents: Any chemical compound with chloro, bromo, iodo or fluoro is halogenated; those with eight or fewer carbons are generally solvents (e.g. halogenated methane, ethane, propane, butane, pentane, hexane, heptane or octane) and may also be used for or registered as pesticides or fumigants. Most are dangerous wastes, either listed or categorical. Organic compounds with more carbons are almost always halogenated pesticides or a contaminant or derivative. Referral to the HSDB is recommended you are unfamiliar with a chemical name or compound, as it contains useful information about synonyms, uses, trade names, waste codes, and other regulatory information about most toxic or potentially toxic chemicals.

Dibenzodioxins and dibenzofurans are normalized to a combined equivalent toxicity based on 2,3,7,8-tetrachloro-p-dibenzodioxin as set out in Ch. 173-340-708(8)(d) and in the Evaluating the Toxicity and Assessing the Carcinogenic Risk of Environmental Mixtures using Toxicity Equivalency Factors Focus Sheet (https://fortress.wa.gov/ecy/clarc/FocusSheets/tef.pdf). Results may be reported as individual compounds and isomers (usually lab results), or as a toxic equivalency value (reports).

FOR ECOLOGY USE ONLY (For Listing Sites):

How did the Site come to be known: ☐ **Site Discovery (received a report):** _____ (Date Report Received)
☐ **ERTS Complaint**
☐ **Other (please explain):** _____

Does an Early Notice Letter need to be sent: ☐ Yes ☐ No
If *No*, please explain why: _____

NAICS Code (if known): _____
Otherwise, briefly explain how property is/was used (i.e., gas station, dry cleaner, paint shop, vacant land, etc.):
_____

Site Unit(s) to be created (Unit Type): ☐ Upland (includes VCP & LUST) ☐ Sediment

If multiple Units needed, please explain why: _____

Cleanup Process Type (for the Unit): ☐ No Process ☐ Independent Action
☐ Voluntary Cleanup Program ☐ Ecology-supervised or conducted
☐ Federal-supervised or conducted

Site Status: ☐ Awaiting Cleanup ☐ Construction Complete – Performance Monitoring
☐ Cleanup Started ☐ Cleanup Complete – Active O&M/Monitoring
☐ No Further Action Required

Site Manager (Default: Southwest Region): _____

Specific confirmed contaminants include:

_____ in Soil

_____ in Groundwater

_____ in Other (specify matrix: _____)

Facility/Site ID No. (if known):
_____

COUNTY ASSESSOR INFO:

Please attach to this report a copy of the tax parcel/ownership information for each parcel associated with the site, as well as a parcel map illustrating the parcel boundary and location.

DEPARTMENT OF ECOLOGY State of Washington

Cleanup Site Details

Cleanup Site ID: 2068

Cleanup Site ID: 2068 **Facility/Site ID:** 19690 **UST ID:** N/A Site Page Site Documents View Map

Cleanup Site Name: 2400-2500 SIMS WAY ROW Glossary

Alternate Names: 2400-2500 SIMS WAY ROW

LOCATION

Address: 2400-2500 SIMS WAY ROW **City:** PORT TOWNSEND **Zip Code:** 98367 **County:** Jefferson

Latitude: 48.10251 **Longitude:** -122.80496 **WRIA:** 17 **Legislative District:** 24 **Congressional District:** 6 **TRS:** 30N 1W 9

DETAIL

Status: No Further Action **NFA Received?** Yes **Is PSI site?** No

Statute: MTCA **NFA Date:** 6/1/2010 **Current VCP?** No **Past VCP?** Yes

Site Rank: N/A **NFA Reason:** Voluntary Cleanup Program Review **Brownfield?** No

Site Manager: Rose, Scott **Responsible Unit:** Southwest **Active Institutional Control?** No

CLEANUP UNITS

Cleanup Unit Name	Unit Type	Unit Status	Resp Unit	Unit Manager	Current Process
2400-2500 SIMS WAY ROW	Upland	No Further Action Required	SW	Rose, Scott	Standard Voluntary Cleanup

ACTIVE INSTITUTIONAL CONTROLS

Instrument Type	Restriction Media	Restrictions/Requirements	Date	Recording Number	Recording County	Tax Parcel
There are no current Institutional Controls in effect for this site.						

AFFECTED MEDIA & CONTAMINANTS

	MEDIA					
Contaminant	**Soil**	**Groundwater**	**Surface Water**	**Sediment**	**Air**	**Bedrock**
Petroleum Products-Unspecified		B				
Petroleum-Gasoline	RB					

Key:
B - Below Cleanup Level C - Confirmed Above Cleanup Level RA - Remediated-Above
S - Suspected R - Remediated RB - Remediated-Below

SITE ACTIVITIES

Activity	Status	Start Date	End Date/ Completion Date
VCP Opinion on Remedial Investigation	Completed	3/3/2010	
VCP Opinion on Site Cleanup	Completed	3/21/2010	6/1/2010
Initial Investigation / Federal Preliminary Assessment	Completed		3/25/2010
Site Status Changed to NFA	Completed		6/1/2010

DEPARTMENT OF ECOLOGY State of Washington

Cleanup Site Details

Cleanup Site ID: 14540

Cleanup Site ID: 14540 **Facility/Site ID:** 73397 **UST ID:** N/A Site Page Site Documents View Map

Cleanup Site Name: Hastings Accident Glossary

Alternate Names: Hastings Accident

LOCATION

Address: 2700 HASTINGS AVE W **City:** PORT TOWNSEND **Zip Code:** 98368 **County:** Jefferson

Latitude: 48.11401 **Longitude:** -122.81163 **WRIA:** 17 **Legislative District:** 24 **Congressional District:** 6 **TRS:** 30N 1W 9

DETAIL

Status: Awaiting Cleanup **NFA Received?** No **Is PSI site?** No

Statute: MTCA **NFA Date:** N/A **Current VCP?** No **Past VCP?** No

Site Rank: N/A **NFA Reason:** N/A **Brownfield?** No

Site Manager: Southwest Region **Responsible Unit:** Southwest **Active Institutional Control?** No

CLEANUP UNITS

Cleanup Unit Name	Unit Type	Unit Status	Resp Unit	Unit Manager	Current Process
Hastings Accident Upland	Upland	Awaiting Cleanup	SW	Southwest Region	No Process

ACTIVE INSTITUTIONAL CONTROLS

Instrument Type	Restriction Media	Restrictions/Requirements	Date	Recording Number	Recording County	Tax Parcel
There are no current Institutional Controls in effect for this site.						

AFFECTED MEDIA & CONTAMINANTS

	MEDIA					
Contaminant	**Soil**	**Groundwater**	**Surface Water**	**Sediment**	**Air**	**Bedrock**
Petroleum-Diesel	S					
Petroleum-Gasoline	S					

Key:
B - Below Cleanup Level C - Confirmed Above Cleanup Level RA - Remediated-Above
S - Suspected R - Remediated RB - Remediated-Below

SITE ACTIVITIES

Activity	Status	Start Date	End Date/ Completion Date
Site Discovery/Release Report Received	Completed		5/3/2017
Initial Investigation / Federal Preliminary Assessment	Completed		5/3/2017
Early Notice Letter(s)	Completed		5/9/2018

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47775 • Olympia, Washington 98504-7775 • 360-407-6300
Call 711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

May 9, 2018

Electronic Copy

City of Port Townsend Public Works
250 Madison St #2R
Port Townsend, WA 98368

Re: Early Notice Letter Regarding the Release of Hazardous Substances

- **Site Name:** Hastings Accident
- **Location:** 2700 Hastings Ave Port Townsend, WA 98368
- **Facility Site ID Number:** 73397

To Whom It May Concern:

The Department of Ecology (Ecology) is required to conduct an Initial Investigation, under Chapter 70.105 Revised Code of Washington (RCW), upon receiving a report of release or threatened release of hazardous substance that may pose a threat to human health or the environment.

The Model Toxics Control Act (MTCA, Chapter 70.105D RCW) mandates Ecology maintain a database of Confirmed or Suspected Contaminated Sites. As a result of the initial investigation conducted by Ecology, this property has been added to the database as a State Cleanup Site and assigned a Facility Site Identification number of 73397. Please note that inclusion in the database does not mean Ecology has determined you to be a potentially liable person.

During the investigation, Ecology found soil and groundwater contaminated with diesel petroleum and other substances above MTCA cleanup levels at the location listed above. In the future, Ecology may conduct a more detailed inspection of this property known as a site hazard assessment. At that time, Ecology will assess whether action will be needed and establish a priority for the work.

Ecology's policy is to work cooperatively with individuals to accomplish prompt and effective cleanups. However, due to limited resources we are not always able to provide requested assistance. Your cooperation with Ecology in planning or conducting a remedial action is not an admission of guilt or liability. Please be aware of state laws that must be adhered to if you decide to proceed with cleanup work on your own.

Enclosed is a Model Toxics Control Act Cleanup Regulation Focus Sheet. This provides a brief overview of the process for the cleanup of contaminated sites. For additional information regarding each step in the cleanup process and Ecology's Voluntary Cleanup Program, feel free to contact me or Nick Acklam, the Southwest Regional Office Voluntary Cleanup Program Coordinator, at (360) 407-6347, or visit Ecology's Toxic Cleanup Program website, http://www.ecy.wa.gov/cleanup.html.

Chapter 70.105D RCW and the implementing regulations, Chapter 173-340 Washington Administrative Code (WAC) which detail these requirements can be found at Ecology's Toxics Cleanup Program website, http://www.ecy.wa.gov/programs/tcp/regs/current_laws_and_rules.html/. If you would like a hard copy of the MTCA regulations, or if you have any questions, please call me at (360) 407-6246. Thank you for your cooperation.

Sincerely,

Kirsten Alvarez
Toxics Cleanup Program
Southwest Regional Office

Enclosure: Model Toxics Control Act Cleanup Regulation Focus Sheet

By certified mail: 91 7199 9991 707 0238 2831

cc: Nick Acklam, Ecology

SCJ ALLIANCE
CONSULTING SERVICES

Technical Memo

To Laura Parsons, P.E., City of Port Townsend

From: Laura Barker, Planner, SCJ Alliance

Date: August 25, 2021

Project: Discovery Road Bikeway and Sidewalks Project

Subject Environmental Justice Determination

Introduction

The purpose of this memo is to document potential project effects on Environmental Justice (EJ) populations in the Discovery Road Bikeway and Sidewalks Project study area. Based on guidance in WSDOT's NEPA Categorical Exclusion Guidebook[1], this project has been classified as a NEPA Categorical Exclusion (CE). The WSDOT Decision Matrix for Small Projects[2], along with the guidance for CE projects provided on WSDOT's website[3], indicate an EJ memo is the appropriate level of documentation for this project.

In compliance with the Presidential Executive Order 12898, DOT Order 5610.2 and FHWA Order 6640.23, and in furtherance of Title VI of the Civil Rights Act of 1964, an EJ Analysis was conducted for the Discovery Road Bikeway and Sidewalks Project. The results of the EJ Analysis show that the project will not have disproportionately adverse effects on minority or low-income populations. The analysis complies with the approved WSDOT guidance and procedures.

1 Project Description

The Discovery Road Bikeway and Sidewalks Project will reconstruct Discovery Road as a two-lane roadway, and will construct bike facilities, sidewalks, curb ramps, crosswalks, drainage improvements, striping, and enhanced crosswalk features (e.g., pedestrian actuated crossing indicators) along the Discovery Road corridor between Rainier Street and Sheridan Street, a length of approximately 0.82 miles. Drainage improvements will include swales, rain gardens, and/or new stormwater pipes connected to new and existing catch basins.

This project would improve public safety along the Discovery Road corridor in support of the City's Transportation Improvement Program (TIP). The project is located entirely within the public right of way; no

[1] https://wsdot.wa.gov/sites/default/files/2008/12/10/LP_CE-Guidebook-Secure.pdf
[2] https://wsdot.wa.gov/sites/default/files/2017/11/15/Env-EJ-DecMatrixSmallProj.pdf; *completed form attached*
[3] https://wsdot.wa.gov/environment/technical/disciplines/social-and-land-use-effects/environmental-justice

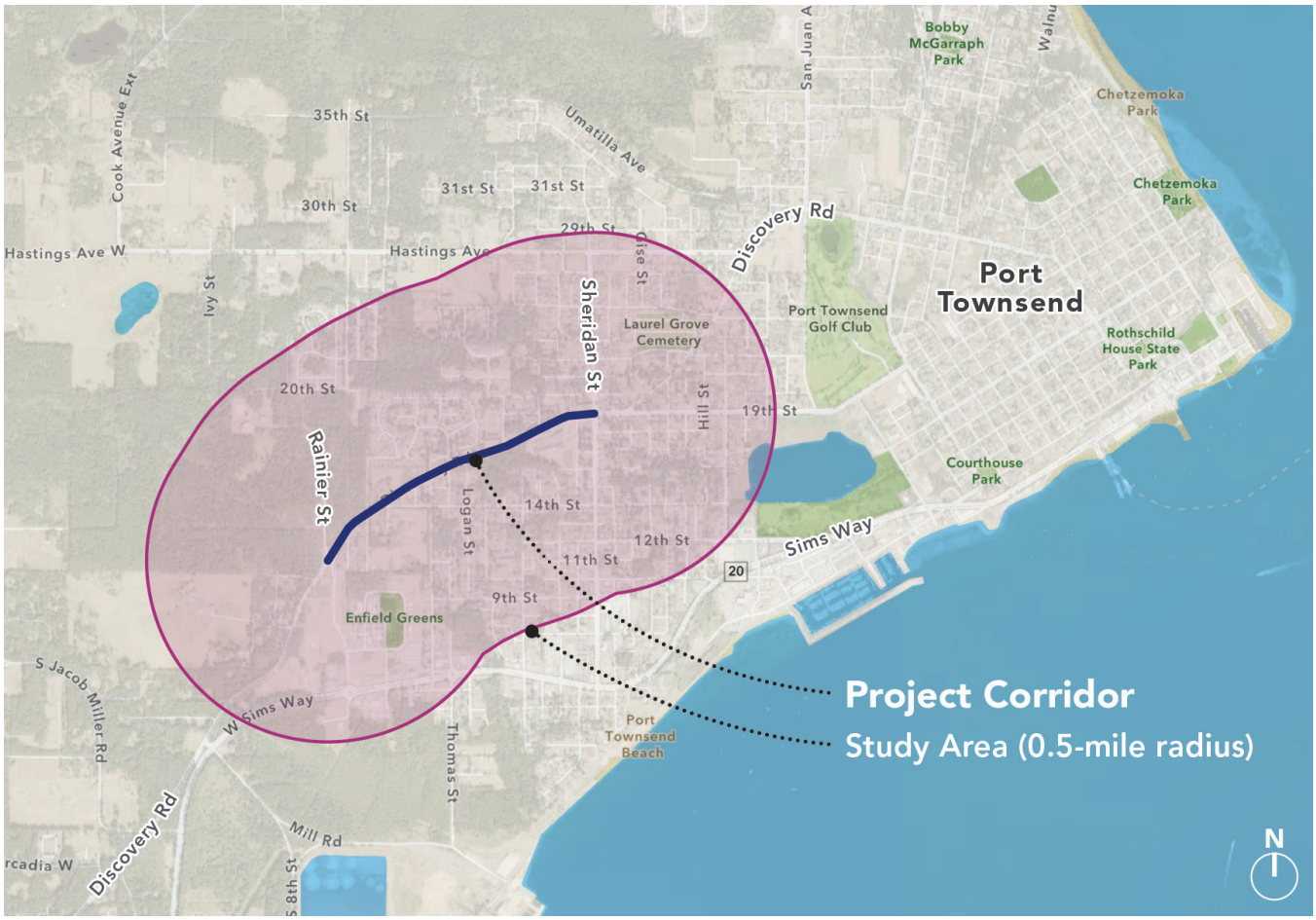


Figure 1: EJ Study Area for Discovery Road Bikeway and Sidewalks Project

right of way acquisition or temporary construction easements are proposed as part of this project. Project construction is anticipated to last 6 to 8 months, and no construction detours are currently planned.

1.1. Existing Conditions in the Project Area

The project area is currently the right of way for a section of Discovery Road, a busy urban corridor which is commonly used as an alternate cross-town driving route and serves Salish Coast Elementary School (located on Discovery Road within the project area). Adjacent properties include undeveloped, forested land to the northwest; residential properties to the northeast, east, and south; some open space lands to the south; and business services to the southwest. The project area currently contains a paved road with associated ditches and right of way. One culvert runs under the road near the Howard Street intersection. Along the southern side of Discovery Road, there are underground water lines and stormwater drainage, as well as overhead power lines. On the north side of the corridor, there are underground communication lines and a trail running parallel to the edge of pavement.

2 Demographics Data

This analysis examined project impacts on EJ populations (minority[4] and low-income[5] populations) within the study area. Census data for the study area was gathered from EPA's Environmental Justice Screening and Mapping Tool (EJScreen)[6]. The EJ study area for this project is defined as extending ½ mile in all directions from the project centerline, as shown in Figure 1. To substantiate the census demographic data for the study area, it was compared with school district demographic data provided by the Washington Office of the Superintendent of Public Instruction (OSPI)[7].

2.1. Census Data

Tables 1 and 2 summarize current census data[8] for EJ populations in the Yelm Loop EJ study area, and whether there is a disparate impact on those populations. Block group-level census data is used, and is limited to only the population located within the study area. This analysis followed WSDOT guidance[9] to determine disparate impact for each EJ population in the study area. No disparate impact was identified for minority or low-income populations.

Table 1: Minority Population in Study Area, 2014-2018 ACS 5-Year Estimates

Race/Ethnicity	Total # of People in Study Area	# of Adversely Affected	Percentage Adversely Affected
Total population	2,691	0	0%
White alone	2,525	0	0%
Black or African American alone	57	0	0%
American Indian and Alaska Native alone	15	0	0%
Asian alone	34	0	0%
Native Hawaiian and Other Pacific Islander alone	0	0	0%
Some other race alone	0	0	0%
Two or more races	60	0	0%
Hispanic	119	0	0%

[4] Individuals who identify themselves as Black, Hispanic, Asian/Pacific Islander, or American Indian/Alaska Native.
[5] Individuals whose household income falls below the federal poverty guidelines as defined by the U.S. Department of Health and Human Services.
[6] EPA EJScreen Mapping Tool, https://ejscreen.epa.gov/mapper/
[7] Source: Washington Office of the Superintendent of Public Instruction (OSPI), Washington State Report Card website; report attached.
[8] Source: U.S. Census Bureau, 2014-2018 American Community Survey 5-Year Estimates; EPA EJ Screen report attached.
[9] "Determining EJ Effects on Project Populations," WSDOT, April 2020, https://wsdot.wa.gov/sites/default/files/2020/04/13/Env-EJ-Tsk458dDetProjEffect.pdf

Table 2: Low-Income Households in Study Area, 2014-2018 ACS 5-Year Estimates

Households	Total # of Households in Study Area	# of Adversely Affected	Percentage Adversely Affected
Total number of households	1,370	0	0%
Households below $25,000	346	0	0%

2.2. School Demographic Data

The elementary school closest to the study area is Salish Coast Elementary School (formerly known as Grant Elementary School). The school demographic data is summarized in Table 3.

Table 3: Salish Coast Elementary School Demographic Data

Race/Ethnicity	Number of Persons	Percentage
White	305	78.2%
Minority	85	21.8%
Hispanic or Latino	*38*	*9.7%*
American Indian and Alaskan Native	*7*	*1.8%*
Black or African American	*5*	*1.3%*
Asian	*9*	*2.3%*
Native Hawaiian and Other Pacific Islander	*0*	*0.0%*
Two or More Races	*26*	*6.7%*
Low Income	196	50.3%
English Learners	21	5.4%

Source: Washington Office of the Superintendent of Public Instruction (OSPI), Washington State Report Card website; report attached.

For the EJ populations examined in this analysis, the school demographic data show a larger percentage of each EJ group in the school district than the census data indicates within the study area:

- Minority Populations
  - Study area census data: 6.2%
  - School demographic data: 21.8%
- Low-Income Populations
  - Study area census data: 25.3%
  - School demographic data: 50.3%

Because the study area and the school district boundary do not fully overlap, these differences are likely due to a difference in geographical boundaries.

2.3. Languages Spoken in the Study Area

Project information must be provided in languages other than English when an LEP population of five percent or greater has been identified in a project area. According to the census data, 0.2% of those ages 5 and up in the study area are considered Limited English Proficiency (LEP) individuals[10]. The school demographic data (Table 3, above) indicates 5.4% of students at Salish Coast Elementary School are considered "English learners;" because the study area and the school district boundary do not fully overlap, these differences are likely due to a difference in geographical boundaries.

According to the census data, 6.9% of people ages 5 and up in the study area primarily speak a language other than English in the home. For project outreach and communication purposes, the Office Coordinator for Port Townsend School District confirmed that the languages spoken among English learners at Salish Coast Elementary School are Spanish, Swedish, Chinese, Filipino, Vietnamese, and Japanese. Census data for languages spoken in the study area by those who primarily speak a non-English language in the home are listed in Table 4.

Table 4: Population in the Study Area by Non-English Language Spoken at Home, 2014-2018 ACS 5-Year Estimates

Language	Population (>5 Years Old) Speaking a Language Other than English in the Home	
	Number of Persons	Percentage
Spanish	39	1.5%
French	12	0.5%
German	11	0.4%
Other Indo-European	26	1.0%
Korean	3	0.1%
Vietnamese	62	2.4%
Other Asian	20	0.8%
Other Non-Specified	0	0.0%

3 Project Effects

3.1. Construction Impacts

The project would result in short-term temporary noise impacts related to construction; all construction activities would be conducted in compliance with City of Port Townsend noise regulations. Short-term increases in dust would occur during construction, but these impacts are not highly adverse and would be mitigated through best management practices.

[10] *Defined as the percentage of the population 5 years or older who self-identify as speaking English "less than well" according to the U.S. Census ACS 5-Year Estimate data.*

Port Townsend School District bus routes use Discovery Road in the project vicinity; except during the summer months, school bus service would be occurring in the vicinity of this project during construction. WSDOT would coordinate with the school district to minimize impacts or delays to existing bus routes. To minimize impacts to emergency services, WSDOT would coordinate with emergency responders to identify alternate routing during construction.

Construction activities would not have any disproportionate adverse effect on EJ populations.

3.2. Long-Term Impacts and Benefits

While construction of the proposed improvements would shift the roadway centerline approximately five feet northwesterly from its current location, no long-term noise impacts are anticipated.

The addition of complete street facilities along Discovery Road would enhance the transportation network in Port Townsend, consistent with the City's TIP.

The provision of these facilities would benefit the entire study area and the community as a whole. All area residents and people who commute along the Discovery Road corridor would benefit from improved safety. Access to community resources, including to Salish Coast Elementary School, would be improved due to the addition of nonmotorized facilities along this length of the corridor.

The project would not have any long-term disproportionate adverse effect on EJ populations.

4 Determination

There will be minor temporary impacts related to the project, which will affect both EJ and non-EJ populations and will not be disproportionately borne by EJ populations. The project will also provide improvements that benefit EJ and non-EJ populations alike, including new complete street facilities along a busy section of Discovery Road, and provision of a safe roadway for the traveling public.

As the project effects are minor and there is no controversy, this assessment concludes that no EJ populations have been identified that would be disproportionately adversely affected by this project as determined above. Therefore, this project has met the provisions of Executive Order 12898, as it is supported by Title VI of the Civil Rights Act.

Attachments:

Completed WSDOT "Decision Matrix for Small Projects" form
EJ Screen Report, Discovery Road Bikeway and Sidewalks Project Study Area (2014-2018 ACS 5-Year Estimates)
OSPI Washington State Report, Salish Coast Elementary School

SOCIAL & COMMUNITY IMPACTS DECISION MATRIX

The following decision matrix is an approach that uses a series of questions with Yes/No answers to provide direction on when additional analysis and documentation is appropriate for a proposed project. If additional documentation is necessary, consider all potential sources of impacts to protected populations in the analysis.

1) Are any protected populations present within the proposed limits of the project's impacts?

   No – Document findings on CE documentation form and include demographic data; findings should be confirmed by using at least two information sources. No further analysis is required.

   Yes – Proceed to question 2.

2) Does the project require permanent right-of-way acquisition?

   No – Document findings on CE documentation form and include demographic data; findings should be confirmed by using at least two information sources. No further analysis is required. **See Environmental Justice Technical Memo (SCJ, August 2021).**

   Yes – Proceed to question 3.

3) Does the proposed project require any relocation of real and/or personal property?

   No – Document findings on CE documentation form and include demographic data; findings should be confirmed by using at least two information sources. Proceed to question 4.

   Yes – An EJ memo is likely required. If so, the local agency must describe the project impacts and analyze their severity. Proceed to question 5.

4) Does the permanent right of way acquisition require more than 10 percent of any parcel?

   No – Document findings on CE documentation form and include demographic data; findings should be confirmed by using at least two information sources. No further analysis is required.

   Yes – Proceed to question 5.

5) Does the proposed project require displacement of more than 10 residences or businesses?

   No – An EJ memo is required. The local agency must describe and analyze the proposed project's potential impacts in the form of an EJ Memo.

   Yes – This project will require a discipline report and public outreach to make an environmental justice determination.

EJSCREEN ACS Summary Report

Location: User-specified linear location
Ring (buffer): .5-miles radius
Description: Discovery Road Bikeway and Sidewalks Project - Rainier to Sheridan

Summary of ACS Estimates	2014 - 2018
Population	2,691
Population Density (per sq. mile)	1,531
People of Color Population	269
% People of Color Population	10%
Households	1,370
Housing Units	1,452
Housing Units Built Before 1950	110
Per Capita Income	33,382
Land Area (sq. miles) (Source: SF1)	1.76
% Land Area	95%
Water Area (sq. miles) (Source: SF1)	0.09
% Water Area	5%

	2014 - 2018 ACS Estimates	Percent	MOE (±)
Population by Race			
Total	2,691	100%	359
Population Reporting One Race	2,631	98%	694
White	2,525	94%	357
Black	57	2%	57
American Indian	15	1%	86
Asian	34	1%	170
Pacific Islander	0	0%	12
Some Other Race	0	0%	12
Population Reporting Two or More Races	60	2%	45
Total Hispanic Population	119	4%	62
Total Non-Hispanic Population	2,572		
White Alone	2,422	90%	371
Black Alone	42	2%	44
American Indian Alone	15	1%	86
Non-Hispanic Asian Alone	34	1%	170
Pacific Islander Alone	0	0%	12
Other Race Alone	0	0%	12
Two or More Races Alone	60	2%	45
Population by Sex			
Male	1,298	48%	187
Female	1,393	52%	230
Population by Age			
Age 0-4	79	3%	64
Age 0-17	383	14%	95
Age 18+	2,308	86%	272
Age 65+	769	29%	170

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race.
N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2014 - 2018 .

EJSCREEN ACS Summary Report

Location: User-specified linear location
Ring (buffer): .5-miles radius
Description: Discovery Road Bikeway and Sidewalks Project - Rainier to Sheridan

	2014 - 2018 ACS Estimates	Percent	MOE (±)
Population 25+ by Educational Attainment			
Total	2,204	100%	250
Less than 9th Grade	26	1%	57
9th - 12th Grade, No Diploma	51	2%	70
High School Graduate	520	24%	133
Some College, No Degree	663	30%	120
Associate Degree	98	4%	71
Bachelor's Degree or more	944	43%	176
Population Age 5+ Years by Ability to Speak English			
Total	2,611	100%	310
Speak only English	2,485	95%	296
Non-English at Home[1+2+3+4]	126	5%	137
[1]Speak English "very well"	94	4%	66
[2]Speak English "well"	27	1%	81
[3]Speak English "not well"	5	0%	30
[4]Speak English "not at all"	1	0%	55
[3+4]Speak English "less than well"	6	0%	62
[2+3+4]Speak English "less than very well"	32	1%	101
Linguistically Isolated Households*			
Total	6	100%	62
Speak Spanish	0	0%	12
Speak Other Indo-European Languages	0	0%	12
Speak Asian-Pacific Island Languages	6	100%	61
Speak Other Languages	0	0%	12
Households by Household Income			
Household Income Base	1,370	100%	119
< $15,000	272	20%	90
$15,000 - $25,000	74	5%	54
$25,000 - $50,000	377	28%	91
$50,000 - $75,000	329	24%	111
$75,000 +	318	23%	101
Occupied Housing Units by Tenure			
Total	1,370	100%	119
Owner Occupied	818	60%	100
Renter Occupied	551	40%	113
Employed Population Age 16+ Years			
Total	2,352	100%	279
In Labor Force	1,327	56%	200
Civilian Unemployed in Labor Force	32	1%	32
Not In Labor Force	1,025	44%	169

Data Note: Datail may not sum to totals due to rounding. Hispanic population can be of anyrace.
N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS)
*Households in which no one 14 and over speaks English "very well" or speaks English only.

EJSCREEN ACS Summary Report

Location: User-specified linear location
Ring (buffer): .5-miles radius
Description: Discovery Road Bikeway and Sidewalks Project - Rainier to Sheridan

	2014 - 2018 ACS Estimates	Percent	MOE (±)
Population by Language Spoken at Home*			
Total (persons age 5 and above)	2,541	100%	263
English	2,365	93%	307
Spanish	39	2%	69
French	12	0%	68
French Creole	N/A	N/A	N/A
Italian	N/A	N/A	N/A
Portuguese	N/A	N/A	N/A
German	11	0%	31
Yiddish	N/A	N/A	N/A
Other West Germanic	N/A	N/A	N/A
Scandinavian	N/A	N/A	N/A
Greek	N/A	N/A	N/A
Russian	N/A	N/A	N/A
Polish	N/A	N/A	N/A
Serbo-Croatian	N/A	N/A	N/A
Other Slavic	N/A	N/A	N/A
Armenian	N/A	N/A	N/A
Persian	N/A	N/A	N/A
Gujarathi	N/A	N/A	N/A
Hindi	N/A	N/A	N/A
Urdu	N/A	N/A	N/A
Other Indic	N/A	N/A	N/A
Other Indo-European	26	1%	79
Chinese	0	0%	17
Japanese	N/A	N/A	N/A
Korean	3	0%	22
Mon-Khmer, Cambodian	N/A	N/A	N/A
Hmong	N/A	N/A	N/A
Thai	N/A	N/A	N/A
Laotian	N/A	N/A	N/A
Vietnamese	62	2%	152
Other Asian	20	1%	49
Tagalog	0	0%	17
Other Pacific Island	N/A	N/A	N/A
Navajo	N/A	N/A	N/A
Other Native American	N/A	N/A	N/A
Hungarian	N/A	N/A	N/A
Arabic	0	0%	17
Hebrew	N/A	N/A	N/A
African	N/A	N/A	N/A
Other and non-specified	0	0%	17
Total Non-English	176	7%	404

Data Note: Detail may not sum to totals due to rounding. Hispanic popultion can be of any race.
N/A meansnot available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2014 - 2018.
*Population by Language Spoken at Home is available at the census tract summary level and up.

Washington State Summary
Salish Coast Elementary

1637 Grant St
Port Townsend, WA 98368-7622

3603794535

Enrollment

2020-21 school year

390

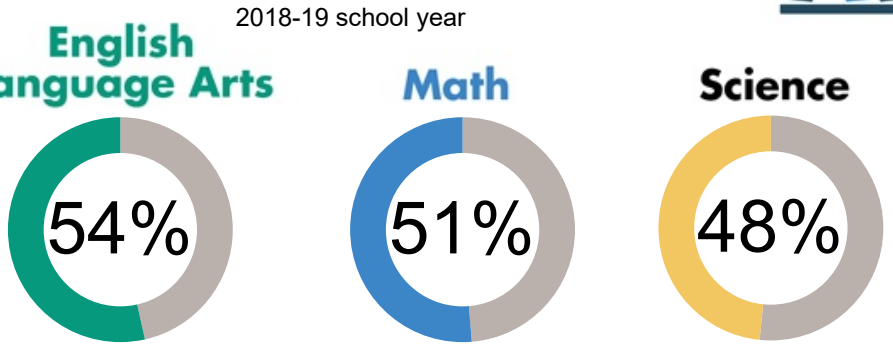
5% English Learners

50% Low Income

Student Performance

How are we doing getting students to their learning goals?

2018-19 school year



Met grade level standards on state administered tests

How engaged are our students?

85% Have Regular Attendance

2019-20 school year

34% Have High English Language Arts Growth

2018-19 school year

24% Have High Math Growth

2018-19 school year

About Our Teachers and Classrooms

2019-20 school year

40 Number of Teachers

67.5% Have Master's Degree or Higher

13.9 Average Years Experience

17.0 Average Class Size

Finances

2018-19 school year

How much money do we spend on each student?

$10,745

Staff Salary & Benefits

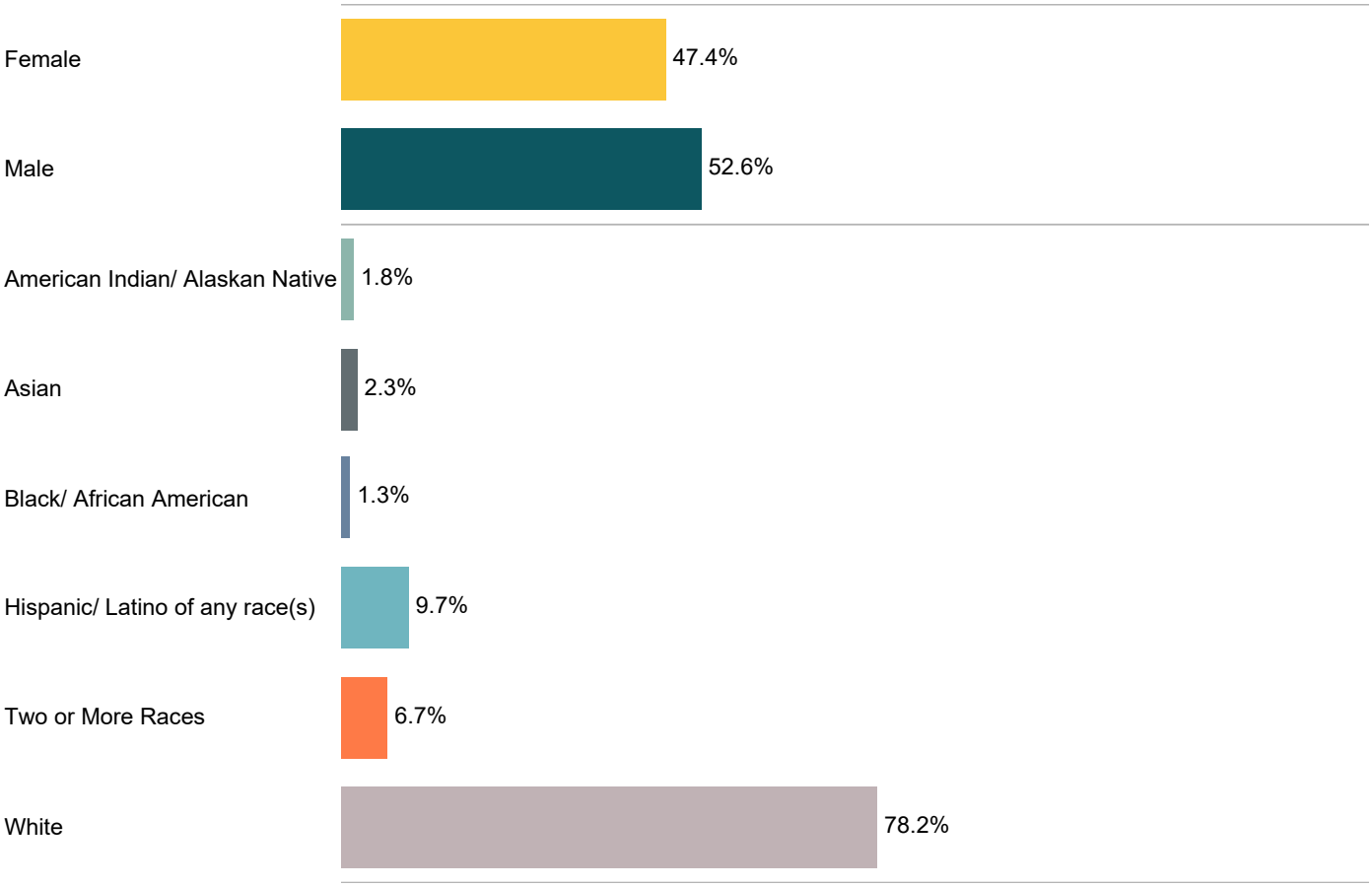
$2,859

Non-Personnel Costs

Some data is suppressed to protect student privacy and will be represented by N<10, blank fields indicate no data was submitted to OSPI for this district or school. To see more, visit https://washingtonstatereportcard.ospi.k12.wa.us/
If you have questions or comments, contact ReportCardRedesign@k12.wa.us

Salish Coast Elementary

2020-21



Salish Coast Elementary
2020-21