Wetland Rating Forms & Figures

Nisqually State Park

WETLAND RATING FORMS

March 2022

| AREA 1 – MAINTENANCE AND ADMINISTRATION BUILDINGS |
|---|
| Wetland CC (Depressional) |
| Wetland FF (Depressional) |
| |
| AREA 2 – PARK ENTRY ROUNDABOUT |
| Wetland EE (Depressional) |
| |
| AREA 3 – BOAT TRAILER PARKING LOT |
| Wetland H (Depressional) |
| Wetland QQ (Depressional) |
| AREA 4 – TRAILHEAD, OVERLOOKS, AND BOARDWALK |
| |
| Wetland GG (Depressional) |
| Wetland HH (Depressional) |
| Wetland FFF (Depressional) |
| AREA 5 — MBR DRAINFIELD |
| |
| Wetland CCC (Depressional) |

| AREA 6 – CAMPGROUND |
|----------------------------------|
| Wetland A (Depressional) |
| Wetland C (Depressional) |
| Wetland RR (Depressional) |
| Wetland SS (Depressional) |
| Wetland TT (Depressional) |
| Wetland UU (Depressional) |
| Wetland VV (Depressional) |
| Wetland WW (Depressional) |
| Wetland XX (Depressional) |
| |
| AREA 7 – OVERLOOK AND LOOP TRAIL |
| Wetland B (Depressional) |
| Wetland Z (Depressional) |
| Wetland NN (Depressional) |
| Wetland YY (Depressional) |
| Wetland ZZ (Depressional) |
| Wetland AAA (Depressional) |
| Wetland BBR (Depressional) |

WETLAND RATING FORMS

AREA 1 - MAINTENANCE AND ADMINISTRATION BUILDINGS

Wetland CC Wetland FF

RATING SUMMARY – Western Washington

Name of wetland (or ID #): <u>CC</u> Date of site visit: <u>8/23/2021</u>

Rated by: <u>Jamie Sloan and Roen Hohlfeld</u> Trained by Ecology? \boxtimes Y \square N Date of training: <u>9/2017</u>

HGM Class used for rating: <u>Depressional</u> 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: Google Earth, Pierce County

OVERALL WETLAND CATEGORY (based on functions ⊠ or special characteristics □)

1. Category of wetland based on FUNCTIONS

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

| FUNCTION | Improving Water Quality | | Н | ydrolo | gic | | Habitat | | | |
|------------------------|-------------------------|---|----------|----------|----------|----------|----------|---------|----------|-------|
| | | | | | Circle t | the ap | propr | iate ra | tings | |
| Site Potential | Н | M | L | Н | M | L | Н | М | <u>L</u> | |
| Landscape Potential | Н | М | <u>L</u> | Н | М | <u>L</u> | <u>H</u> | М | L | |
| Value | <u>H</u> | М | L | <u>H</u> | М | L | Н | M | L | TOTAL |
| Score Based on Ratings | | 6 | | | 6 | | | 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,L4 = 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 | | I | |
| Bog | I | | |
| Mature Forest I | | I | |
| Old Growth Forest | | I | |
| Coastal Lagoon | I | II | |
| Interdunal | I II | III IV | |
| None of the above | | \boxtimes | |

Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

| Map of: | To answer questions: | Figure # |
|---|----------------------|----------|
| Cowardin plant classes | D 1.3, H 1.1, H 1.4 | 1 |
| Hydroperiods | D 1.4, H 1.2 | 2 |
| Location of outlet (can be added to map of hydroperiods) | D 1.1, D 4.1 | 2 |
| Boundary of area within 150 ft of the wetland (can be added to another figure) | D 2.2, D 5.2 | 2 |
| Map of the contributing basin | D 4.3, D 5.3 | 3 |
| 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 | 4 |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website) | D 3.1, D 3.2 | 5 |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web) | D 3.3 | 6 |

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 er | cire unit usually controlled by tides except during floods? |
|----|--|--|
| | ⊠ NO – go to 2 | \square YES – the wetland class is Tidal Fringe – go to 1.1 |
| 1 | 1.1 Is the salinity of the water of | uring periods of annual low flow below 0.5 ppt (parts per thousand)? |
| | | fied as a Freshwater Tidal Fringe use the forms for Riverine wetlands. If it san Estuarine wetland and is not scored. This method cannot be used to |
| 2. | | and precipitation is the only source (>90%) of water to it. Groundwater NOT sources of water to the unit. |
| | \boxtimes NO – go to 3 If your wetland can be classifi | \Box YES – The wetland class is Flats ed as a Flats wetland, use the form for Depressional wetlands. |
| 3. | ☐ The vegetated part of the vegetated part | neet all of the following criteria? retland is on the shores of a body of permanent open water (without any of the year) at least 20 ac (8 ha) in size; ater area is deeper than 6.6 ft (2 m). |
| | ⊠N0 – go to 4 | □ YES - The wetland class is Lake Fringe (Lacustrine Fringe) |
| 4. | ☑ The wetland is on a slope☑ The water flows through the seeps. It may flow subsure | neet all of the following criteria? slope can be very gradual), e wetland in one direction (unidirectional) and usually comes from face, as sheetflow, or in a swale without distinct banks, and without being impounded. |
| | ⊠N0 – go to 5 | \square YES – The wetland class is Slope |
| | | t pond in these type of wetlands except occasionally in very small and d hummocks (depressions are usually <3 ft diameter and less than 1 ft |
| 5. | ☐ The unit is in a valley, or st stream or river, | neet all of the following criteria? ream channel, where it gets inundated by overbank flooding from that ars at least once every 2 years. |

| Motland | nama | or | number: | CC |
|---------|--------|----|---------|----|
| wethand | Hallic | UΙ | mumber. | cc |

| | NO – go to 6NOTE: The Riverine unit can contain depressions flooding | ☐ YES – The wetland class is Riverine that are filled with water when the river is not |
|----|--|---|
| 6. | Is the entire wetland unit in a topographic depressurface, at some time during the year? <i>This mean of the wetland.</i> | sion in which water ponds, or is saturated to the as that any outlet, if present, is higher than the interior |
| | \square NO – go to 7 | oxtimes YES – The wetland class is Depressional |
| 7. | Is the entire wetland unit located in a very flat are flooding? The unit does not pond surface water n maintained by high groundwater in the area. The outlet. | • |
| | □NO – go to 8 | \square 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 | HGM class to |
|---------------------------------------|---------------|
| being rated | use in rating |
| Slope + Riverine | Riverine |
| Slope + Depressional | Depressional |
| Slope + Lake Fringe | Lake Fringe |
| Depressional + Riverine along stream | Depressional |
| within boundary of depression | |
| Depressional + Lake Fringe | Depressional |
| Riverine + Lake Fringe | Riverine |
| Salt Water Tidal Fringe and any other | Treat as |
| class of freshwater wetland | 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.

| <u>DEPRESSIONAL AND FLATS WETLANDS</u> 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 ☐ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing | points = 3 ng outlet. points = 2 | 3 | | |
| ☐ Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions). ☐ Yes | points = 1 $es = 4 \bowtie No = 0$ | 0 | | |
| D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowar | | 5 | | |
| 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 □ Area seasonally ponded is > ½ total area of wetland □ Area seasonally ponded is < ¼ total area of wetland | points = 4 points = 2 points = 0 | 2 | | |
| Total for D 1 Add the points in the bo | oxes above | 10 | | |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 0-5 = L Record the | e rating on the f | irst 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? | = 1 × No = 0 | 0 | | |
| D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? \Box Yes = | = 1 ⊠ No = 0 | 0 | | |
| D 2.3. Are there septic systems within 250 ft of the wetland? | = 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: | : 1 ⊠ No = 0 | 0 | | |
| Total for D 2 Add the points in the bo | oxes above | 0 | | |
| Rating of Landscape Potential If score is: $\Box 3$ or $4 = H$ $\Box 1$ or $2 = M$ $\boxtimes 0 = L$ Record the | rating on the fir | st 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? | = 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? \Box 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)? | = 2 | 2 | | |
| Total for D 3 Add the points in the bo | oxes above | 2 | | |
| Rating of Value If score is: $\square 2-4 = H \square 1 = M \square 0 = L$ Record th | e rating on the f | irst page | | |

| DEPRESSIONAL AND FLATS WETLANDS | |
|--|------------|
| Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation | on |
| D 4.0. Does the site have the potential to reduce flooding and erosion? | |
| D 4.1. Characteristics of surface water outflows from the wetland: ☐ Wetland is a depression or flat depression with no surface water leaving it (no outlet). points = 4 ☐ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. points = 2 ☐ Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1 ☐ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. points = 0 | 4 |
| D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part. □ Marks of ponding are 3 ft or more above the surface or bottom of outlet. points = 7 □ Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet. points = 5 □ Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet. points = 3 □ The wetland is a "headwater" wetland. points = 3 □ Wetland is flat but has small depressions on the surface that trap water. points = 1 □ Marks of ponding less than 0.5 ft (6 in). | 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. ☐ The area of the basin is 10 to 100 times the area of the unit. ☐ The area of the basin is more than 100 times the area of the unit. ☐ Entire wetland is in the Flats class. | 3 |
| Total for D 4 Add the points in the boxes above | 7 |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 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? \square Yes = 1 \square No = 0 | 0 |
| D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? \square Yes = 1 \square No = 0 | 0 |
| D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? \square Yes = 1 \square No = 0 | 0 |
| Total for D 5 Add the points in the boxes above | 0 |
| Rating of Landscape Potential If score is: $\Box 3 = H \Box 1$ or $2 = M \boxtimes 0 = L$ 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 ■ □ 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. | 2 |
| D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? | 0 |
| | • |
| | 2 |

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

Record the rating on the first page

| These questions apply to wetlands of all HGM classes. | |
|---|---|
| HABITAT FUNCTIONS - Indicators that site functions to provide important habitat | |
| H 1.0. Does the site have the potential to provide habitat? | |
| H 1.1. Structure of plant community: Indicators are Cowardin classes and strata within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked. □ Aquatic bed | 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 | 1 |
| H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle If you counted: > 19 species points = 2 > 5 - 19 species points = 1 < 5 species points = 0 | 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 All three diagrams in this row are HIGH = 3points | 0 |

| H 1.5. Special habitat features: Check the habitat features that are present in the wetland. The number of checks is the numb | mber of points. | | | |
|--|--------------------------|---------------|--|--|
| ⊠ Standing snags (dbh > 4 in) within the wetland. | | | | |
| | ls at least 2 2 ft /1 m) | | | |
| Undercut banks are present for at least 6.6 ft (2 m) AND/OR overhanging plants extend over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m). | | 2 | | |
| \square Stable steep banks of fine material that might be used by beaver or muskrat for denn | | 3 | | |
| slope) OR signs of recent beaver activity are present (cut shrubs or trees that have no where wood is exposed). | ot yet weathered | | | |
| ☐ 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). | | | | |
| $oxtimes$ Invasive plants cover less than 25% of the wetland area in every stratum of plants (see μ | H 1.1 for list of | | | |
| strata). | | | | |
| Total for H 1 Add the points | s in the boxes above | 6 | | |
| Rating of Site Potential If score is: \Box 15-18 = H \Box 7-14 = M \boxtimes 0-6 = L | Record the rating on t | he 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 + [(%moderate and low intensity land uses)/2] = 30% + (| 21%/2) = 40.5% | | | |
| If total accessible habitat is: | | | | |
| | points = 3 | 3 | | |
| ☐ 20-33% of 1 km Polygon | points = 2 | J | | |
| ☐ 10-19% of 1 km Polygon | points = 1 | | | |
| \Box < 10% of 1 km Polygon | points = 0 | | | |
| | points = 0 | | | |
| H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. **Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2 = 72% + (26%/2) = 85% | | | | |
| | - | | | |
| ☐ Undisturbed habitat > 50% of Polygon | points = 3 | 3 | | |
| ☐ Undisturbed habitat 10-50% and in 1-3 patches | points = 2 | | | |
| ☐ Undisturbed habitat 10-50% and > 3 patches | points = 1 | | | |
| ☐ Undisturbed habitat < 10% of 1 km Polygon | points = 0 | | | |
| H 2.3. Land use intensity in 1 km Polygon: If | | | | |
| $\square >$ 50% of 1 km Polygon is high intensity land use | points = (- 2) | 0 | | |
| | points = 0 | | | |
| Total for H 2 Add the points | s in the boxes above | 6 | | |
| Rating of Landscape Potential If score is: | Record the rating on th | e 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 | ly the highest score | | | |
| that applies to the wetland being rated. | | | | |
| Site meets ANY of the following criteria: | points = 2 | | | |
| \square It has 3 or more priority habitats within 100 m (see next page) | | | | |
| \square 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 Na | | | | |
| ☐ It has been categorized as an important habitat site in a local or regional comprehe | ensive plan, | | | |
| in a Shoreline Master Plan, or in a watershed plan | nainta 1 | | | |
| ☑ Site has 1 or 2 priority habitats (listed on next page) within 100 m☐ Site does not meet any of the criteria above | points = 1 points = 0 | | | |
| Site does not ineet any or the criteria above | μοιπις – υ | | | |

Rating of Value If score is: $\Box 2 = H \boxtimes 1 = M \Box 0 = L$

Record the rating on the first page

WDFW Priority Habitats

<u>Priority habitats listed by WDFW</u> (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.

| \square 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 (<i>full descriptions in WDFW PHS report</i>). |
| \square Herbaceous Balds: Variable size patches of grass and forbs on shallow soils over bedrock. |
| \Box Old-growth/Mature forests: <u>Old-growth west of Cascade crest</u> – 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. <u>Mature forests</u> – 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 (<i>full descriptions in WDFW PHS report p. 158 – see web link above</i>). |
| \square Riparian : The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other. |
| \square Westside Prairies: Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (<i>full descriptions in WDFW PHS report p. 161 – see web link above</i>). |
| ☐ 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. (<i>full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page</i>). |
| \Box 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. |
| \Box Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation. |
| \Box Talus: Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, and or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs. |
| \boxtimes 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.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

| Wetland Type | Category |
|--|----------|
| Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met. | |
| SC 1.0. Estuarine wetlands | |
| Does the wetland meet the following criteria for Estuarine wetlands? | |
| ☐ The dominant water regime is tidal, | |
| \square Vegetated, and | |
| ☐ With a salinity greater than 0.5 ppt ☐ Yes –Go to SC 1.1 ☐ No= Not an estuarine wetland | |
| 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? | Cat. I |
| \Box Yes = Category I \Box No - Go to SC 1.2 | |
| SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? | |
| \Box The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has | Cat. I |
| less than 10% cover of non-native plant species. (If non-native species are <i>Spartina</i> , see page 25) | |
| ☐ At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | |
| un- mowed grassland. | Cat. II |
| \Box 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 | |
| CC 2.0. Westlands of High Consequention Value (WHCV) | |
| 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? | |
| $\frac{\text{http://www.dnr.wa.gov/NHPwetlandviewer}}{\text{SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland?}} $ | Cat. I |
| http://file.dnr.wa.gov/publications/amp_nh_wetlands_trs.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? | |
| <u> </u> | |
| 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? \Box Yes – Go to SC 3.3 \boxtimes 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? \Box Yes – Go to SC 3.3 \boxtimes 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% | Cat. I |
| 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 | |

| 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? <i>If you answer YES you will still need to rate the wetland based on its functions.</i> □ 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). | Cat. I |
| □Yes = Category I ⊠No = Not a forested wetland for this section | |
| 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) ☐ 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). ☐ At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. ☐ The wetland is larger than ¹/₁₀ ac (4350 ft²) ☐ Yes = Category I ☐ No = Category II | Cat. 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 Ocean Shores-Copalis: Lands west of SR 115 and SR 109 Yes – Go to SC 6.1 No = not an interdunal wetland for rating | Cat I Cat. II |
| 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)? 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 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. III Cat. IV |
| Category of wetland based on Special Characteristics If you answered No for all types, enter "Not Applicable" on Summary Form | NA |

Wetland name or number: Click here to enter text.

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RATING SUMMARY – Western Washington

Name of wetland (or ID #): <u>FF</u> Date of site visit: <u>11/23/2020</u>

Rated by: Jamie Slone and Roen Hohlfeld Trained by Ecology? \boxtimes Y \square N Date of training: <u>9/2017</u>

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: Google Earth, Pierce County

OVERALL WETLAND CATEGORY (based on functions ⊠ or special characteristics □)

1. Category of wetland based on FUNCTIONS

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

| FUNCTION | Improving Water Quality | | Hy | ydrolo | drologic | | Habitat | | | |
|------------------------|--------------------------------|---|----|----------|----------|---|----------|---|---|-------|
| | Circle the appropriate ratings | | | | | | | | | |
| Site Potential | Н | M | L | Н | M | L | Н | M | L | |
| Landscape Potential | Н | M | L | Н | M | L | <u>H</u> | М | L | |
| Value | <u>H</u> | М | L | <u>H</u> | М | L | Н | M | L | TOTAL |
| Score Based on Ratings | | 7 | | | 7 | | | 7 | | 21 |

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,L4 = 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 | | \boxtimes |

Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

| Map of: | To answer questions: | Figure # |
|---|----------------------|----------|
| Cowardin plant classes | D 1.3, H 1.1, H 1.4 | 1 |
| Hydroperiods | D 1.4, H 1.2 | 2 |
| Location of outlet (can be added to map of hydroperiods) | D 1.1, D 4.1 | 2 |
| Boundary of area within 150 ft of the wetland (can be added to another figure) | D 2.2, D 5.2 | 2 |
| Map of the contributing basin | D 4.3, D 5.3 | 3 |
| 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 | 4 |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website) | D 3.1, D 3.2 | 5 |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web) | D 3.3 | 6 |

HGM Classification of Wetlands in Western Washington

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you

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

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?

□ 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)

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.

□ YES − The wetland class is Flats

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

plants on the surface at any time of the year) at least 20 ac (8 ha) in size;

☐ The vegetated part of the wetland is on the shores of a body of permanent open water (without any

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

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

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

 \square At least 30% of the open water area is deeper than 6.6 ft (2 m).

- \boxtimes 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**.

 \boxtimes NO – go to 5

 \boxtimes NO – go to 4

 \square **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,
 - \Box The overbank flooding occurs at least once every 2 years.

| Wetland name or ni | umber: | ۲r |
|--------------------|--------|----|
|--------------------|--------|----|

| | NO – go to 6NOTE: The Riverine unit can contain depression flooding | \square YES – The wetland class is Riverine ns that are filled with water when the river is not | |
|--|--|--|--|
| 6. | 1 9 1 | ression in which water ponds, or is saturated to the rans that any outlet, if present, is higher than the interior | |
| | □ 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 flooding? The unit does not pond surface water more than a few inches. The unit seem maintained by high groundwater in the area. The wetland may be ditched, but has no coutlet. | | | |
| | □ NO – go to 8 | \square 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 | HGM class to |
|---------------------------------------|---------------|
| being rated | use in rating |
| Slope + Riverine | Riverine |
| Slope + Depressional | Depressional |
| Slope + Lake Fringe | Lake Fringe |
| Depressional + Riverine along stream | Depressional |
| within boundary of depression | |
| Depressional + Lake Fringe | Depressional |
| Riverine + Lake Fringe | Riverine |
| Salt Water Tidal Fringe and any other | Treat as |
| class of freshwater wetland | 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.

| 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: | | | | | |
| oxtimes Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (i | | | | | |
| \square Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing | points = 3 | _ | | | |
| wettand has an intermittently nowing stream of ditch, OK nightly constricted permanently nowing | points = 2 | 3 | | | |
| \Box Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. | points = 1 | | | | |
| $\ \square$ 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 Coward | | | | | |
| ☑ Wetland has persistent, ungrazed, plants > 95% of area | points = 5 | | | | |
| ☐ Wetland has persistent, ungrazed, plants > 1/2 of area | points = 3 | 5 | | | |
| \square Wetland has persistent, ungrazed plants > 1/10 of area | points = 1 | | | | |
| \square 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. | | | | | |
| \square Area seasonally ponded is > $\frac{1}{2}$ total area of wetland | points = 4 | 2 | | | |
| ☑ Area seasonally ponded is > ¼ total area of wetland | points = 2 | | | | |
| ☐ Area seasonally ponded is < ¼ total area of wetland | points = 0 | | | | |
| Total for D 1 Add the points in the box | es above | 10 | | | |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 0-5 = L Record the rating on the fire | | | | | |
| 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? \square Yes = 3 | 1 □ No = 0 | 1 | | | |
| D 2.3. Are there septic systems within 250 ft of the wetland? \Box Yes = 3 | 1 ⊠ No = 0 | 0 | | | |
| D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in | | 0 | | | |
| · | 1 ⊠ No = 0 | | | | |
| Total for D 2 Add the points in the box | es above | 2 | | | |
| Rating of Landscape Potential If score is: $\square 3$ or $4 = H$ $\square 1$ or $2 = M$ $\square 0 = L$ Record the relationship is $\square 3$ or $4 = H$ $\square 1$ or $2 = M$ $\square 0 = L$ | ating on the fir | st 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 | | 0 | | | |
| water that is on the 303(d) list? \Box Yes = 3 | 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? \Box Yes = 3 | 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)? $	extstyle 	extstyle $ | 2 | 2 | | | |
| Total for D 3 Add the points in the box | es above | 2 | | | |
| Rating of Value If score is: $\boxtimes 2-4 = H \square 1 = M \square 0 = L$ Record the | rating on the f | irst page | | | |

| DEPRESSIONAL AND FLATS WETLANDS | | | | | |
|---|------------|--|--|--|--|
| Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation | on | | | | |
| 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). ☐ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. ☐ D 4.1. Characteristics of surface water outlet (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet | 4 | | | | |
| D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part. □ Marks of ponding are 3 ft or more above the surface or bottom of outlet. points = 7 □ Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet. points = 5 □ Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet. points = 3 □ The wetland is a "headwater" wetland. points = 3 □ Wetland is flat but has small depressions on the surface that trap water. points = 1 □ Marks of ponding less than 0.5 ft (6 in). | 3 | | | | |
| 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. □ The area of the basin is 10 to 100 times the area of the unit. □ The area of the basin is more than 100 times the area of the unit. □ Entire wetland is in the Flats class. | 3 | | | | |
| Total for D 4 Add the points in the boxes above | | | | | |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 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? $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$ | 1 | | | | |
| D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? \square Yes = 1 \square 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.)? \square Yes = 1 \square No = 0 | 0 | | | | |
| Total for D 5 Add the points in the boxes above | 2 | | | | |
| Rating of Landscape Potential If score is: $\Box 3 = H \ \Box 1$ or $2 = M \ \Box 0 = L$ 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 ■ □ 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. | 2 | | | | |
| D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? | 0 | | | | |
| ☐Yes = 2 ☒ No = 0 | _ | | | | |
| Total for D 6 Add the points in the boxes above | 2 | | | | |

| 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 | 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 □ Seasonally flooded or inundated □ Saturated only □ Permanently flowing stream or river in, or adjacent to, the wetland □ Seasonally flowing stream in, or adjacent to, the wetland □ Lake Fringe wetland □ Freshwater tidal wetland □ Seasonally flowing stream or river in to, the wetland □ Lake Fringe wetland □ Lake Fringe wetland □ Seasonally flowing stream in, or adjacent to, the wetland □ Lake Fringe wetland | 2 |
| H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle If you counted: | 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 All three diagrams in this row are □ HIGH = 3points | 0 |

| | | 1 | | |
|--|---|----------------|--|--|
| H 1.5. Special habitat features: | | | | |
| Check the habitat features that are present in the wetland. <i>The number</i> of | | | | |
| □ Large, downed, woody debris within the wetland (> 4 in diameter and) | 1 6 ft long). | | | |
| Standing snags (dbh > 4 in) within the wetland. ■ The standing snags (dbh = 4 in) within the wetland. ■ The standing snags (dbh = 4 in) within the wetland. ■ The standing snags (dbh = 4 in) within the wetland. ■ The standing snags (dbh = 4 in) within the wetland. ■ The standing snags (dbh = 4 in) within the wetland. ■ The standing snags (dbh = 4 in) within the wetland. ■ The standing snags (dbh = 4 in) within the wetland. ■ The standing snags (dbh = 4 in) within the wetland. ■ The standing snags (dbh = 4 in) within the wetland. ■ The standing snags (dbh = 4 in) within the wetland. ■ The standing snags (dbh = 4 in) within the wetland. ■ The standing snags (dbh = 4 in) within the wetland. ■ The stand | | | | |
| Undercut banks are present for at least 6.6 ft (2 m) AND/OR overhan over a stream (or ditch) in, or contiguous with the wetland, for at least | = = : | | | |
| ☐ Stable steep banks of fine material that might be used by beaver or | | 3 | | |
| slope) OR signs of recent beaver activity are present (cut shrubs or | | | | |
| where wood is exposed). | | | | |
| ☐ At least ¼ ac of thin-stemmed persistent plants or woody branches a | re present in areas that are | | | |
| permanently or seasonally inundated (structures for egg-laying by an | • | | | |
| | | | | |
| strata). | a o. p.ao (000 // 2.2) o o, | | | |
| Total for H 1 | Add the points in the boxes above | 7 | | |
| Rating of Site Potential If score is: \Box 15-18 = H \boxtimes 7-14 = M \Box 0-6 = L | Record the rating on t | the first page | | |
| H 2.0. Does the landscape have the potential to support the habitat fund | ctions of the site? | | | |
| | 1 | | | |
| H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>). **Calculate: % undisturbed habitat + [(%moderate and low intensity land unit)]. | cos)/2] = 229/ ± /49//2) = 249/ | | | |
| | Ses//2] - 22% + (4%/2) - 24% | | | |
| If total accessible habitat is: | | _ | | |
| \square > 1/3 (33.3%) of 1 km Polygon | points = 3 | 2 | | |
| □ 20-33% of 1 km Polygon | points = 2 | | | |
| ☐ 10-19% of 1 km Polygon | points = 1 | | | |
| \square < 10% of 1 km Polygon | points = 0 | | | |
| H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. | | | | |
| Calculate: % undisturbed habitat + [(%moderate and low intensity land u | ses)/2 = 87% + (12%/2) = 93 % | | | |
| ☑ Undisturbed habitat > 50% of Polygon | points = 3 | 2 | | |
| ☐ Undisturbed habitat 10-50% and in 1-3 patches | points = 2 | 3 | | |
| ☐ Undisturbed habitat 10-50% and > 3 patches | points = 1 | | | |
| ☐ Undisturbed habitat < 10% of 1 km Polygon | points = 0 | | | |
| H 2.3. Land use intensity in 1 km Polygon: If | · | | | |
| □ > 50% of 1 km Polygon is high intensity land use | points = (- 2) | 0 | | |
| | points = 0 | | | |
| Total for H 2 | Add the points in the boxes above | 5 | | |
| Rating of Landscape Potential If score is: $\boxtimes 4-6 = H \square 1-3 = M \square < 1 = L$ | Record the rating on the | | | |
| | | | | |
| 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 po | olicies? 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) | | | | |
| \square It provides habitat for Threatened or Endangered species (any pla | | | | |
| ☐ It is mapped as a location for an individual WDFW priority species | | 1 | | |
| ☐ It is a Wetland of High Conservation Value as determined by the | · | | | |
| It has been categorized as an important habitat site in a local or r in a Shoreline Master Plan, or in a watershed plan | egional comprehensive plan, | | | |
| | points = 1 | | | |
| ☐ Site does not meet any of the criteria above | points = 0 | | | |
| The second secon | points 0 | | | |

Rating of Value If score is: $\Box 2 = H \boxtimes 1 = M \Box 0 = L$

Record the rating on the first page

WDFW Priority Habitats

<u>Priority habitats listed by WDFW</u> (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.

| \square 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 (<i>full descriptions in WDFW PHS report</i>). |
| \square Herbaceous Balds: Variable size patches of grass and forbs on shallow soils over bedrock. |
| \Box Old-growth/Mature forests: <u>Old-growth west of Cascade crest</u> – 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. <u>Mature forests</u> – 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 (<i>full descriptions in WDFW PHS report p. 158 – see web link above</i>). |
| \square Riparian : The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other. |
| \square Westside Prairies: Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (<i>full descriptions in WDFW PHS report p. 161 – see web link above</i>). |
| ☐ 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. (<i>full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page</i>). |
| \Box 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. |
| \Box Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation. |
| \Box Talus: Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, and or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs. |
| \boxtimes 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.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

| Wetland Type | Category |
|--|----------|
| Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met. | |
| SC 1.0. Estuarine wetlands | |
| Does the wetland meet the following criteria for Estuarine wetlands? | |
| \square 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 | |
| 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? | Cat. I |
| \Box Yes = Category I \Box No - Go to SC 1.2 | Cut. 1 |
| | |
| SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? | Cat. I |
| ☐ The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has | Cat. i |
| less than 10% cover of non-native plant species. (If non-native species are <i>Spartina</i> , see page 25) | |
| \square At least $lpha$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | Cat. II |
| un- mowed grassland. | Cat. II |
| \square 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 | |
| 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? | |
| — | |
| SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? | |
| http://www.dnr.wa.gov/NHPwetlandviewer □Yes = Category I □No = Not a WHCV | Cat. I |
| SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? | |
| http://file.dnr.wa.gov/publications/amp_nh_wetlands_trs.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? | |
| <u> </u> | |
| 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? \Box Yes – Go to SC 3.3 \boxtimes 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? \Box Yes – Go to SC 3.3 \boxtimes 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% | Cat. I |
| 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 | |

| 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? <i>If you answer YES you will still need to rate the wetland based on its functions.</i> □ 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). | Cat. I |
| □Yes = Category I ⊠No = Not a forested wetland for this section | |
| 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) ☐ 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). ☐ At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. ☐ The wetland is larger than ¹/₁₀ ac (4350 ft²) ☐ Yes = Category I ☐ No = Category II | Cat. 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 Ocean Shores-Copalis: Lands west of SR 115 and SR 109 Yes – Go to SC 6.1 No = not an interdunal wetland for rating | Cat I Cat. II |
| 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)? 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 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. III Cat. IV |
| Category of wetland based on Special Characteristics If you answered No for all types, enter "Not Applicable" on Summary Form | NA |

Wetland name or number: Click here to enter text.

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WETLAND RATING FORMS

AREA 2 — PARK ENTRY ROUNDABOUT

Wetland EE

RATING SUMMARY – Western Washington

Name of wetland (or ID #): <u>EE</u> Date of site visit: <u>11/23/2020</u>

Rated by: Jamie Slone and Roen Hohlfeld Trained by Ecology? \boxtimes Y \square N Date of training: <u>9/2017</u>

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: Google Earth, Pierce County

OVERALL WETLAND CATEGORY (based on functions ⊠ or special characteristics □)

1. Category of wetland based on FUNCTIONS

- ☐ Category I Total score = 23 27
- ☐ Category III Total score = 16 19
- ☐ Category IV Total score = 9 15

| FUNCTION | Improving Water Quality | | Hy | ydrolo | ogic | | Habita | at | | |
|------------------------|----------------------------|---|----|----------|--------|----------|----------|---------|-------|-------|
| | | | | | Circle | the ap | propr | iate ra | tings | |
| Site Potential | Н | M | L | Н | M | L | Н | M | L | |
| Landscape Potential | Н | M | L | Н | М | <u>L</u> | <u>H</u> | М | L | |
| Value | <u>H</u> | М | L | <u>H</u> | М | L | Н | M | L | TOTAL |
| Score Based on Ratings | | 7 | | | 6 | | | 7 | | 20 |

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

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

2. Category based on SPECIAL CHARACTERISTICS of wetland

| CHARACTERISTIC | CATI | GORY |
|------------------------------------|------|-------------|
| 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 | | \boxtimes |

Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

| Map of: | To answer questions: | Figure # |
|---|----------------------|----------|
| Cowardin plant classes | D 1.3, H 1.1, H 1.4 | 1 |
| Hydroperiods | D 1.4, H 1.2 | 2 |
| Location of outlet (can be added to map of hydroperiods) | D 1.1, D 4.1 | 2 |
| Boundary of area within 150 ft of the wetland (can be added to another figure) | D 2.2, D 5.2 | 2 |
| Map of the contributing basin | D 4.3, D 5.3 | 3 |
| 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 | 4 |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website) | D 3.1, D 3.2 | 5 |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web) | D 3.3 | 6 |

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 er | cire unit usually controlled by tides except during floods? |
|----|--|--|
| | ⊠ NO – go to 2 | \square YES – the wetland class is Tidal Fringe – go to 1.1 |
| 1 | 1.1 Is the salinity of the water of | uring periods of annual low flow below 0.5 ppt (parts per thousand)? |
| | | fied as a Freshwater Tidal Fringe use the forms for Riverine wetlands. If it san Estuarine wetland and is not scored. This method cannot be used to |
| 2. | | and precipitation is the only source (>90%) of water to it. Groundwater NOT sources of water to the unit. |
| | \boxtimes NO – go to 3 If your wetland can be classifi | \Box YES – The wetland class is Flats ed as a Flats wetland, use the form for Depressional wetlands. |
| 3. | ☐ The vegetated part of the vegetated part | neet all of the following criteria? retland is on the shores of a body of permanent open water (without any of the year) at least 20 ac (8 ha) in size; ater area is deeper than 6.6 ft (2 m). |
| | ⊠N0 – go to 4 | □ YES - The wetland class is Lake Fringe (Lacustrine Fringe) |
| 4. | ☑ The wetland is on a slope☑ The water flows through the seeps. It may flow subsure | neet all of the following criteria? slope can be very gradual), e wetland in one direction (unidirectional) and usually comes from face, as sheetflow, or in a swale without distinct banks, and without being impounded. |
| | ⊠N0 – go to 5 | \square YES – The wetland class is Slope |
| | | t pond in these type of wetlands except occasionally in very small and d hummocks (depressions are usually <3 ft diameter and less than 1 ft |
| 5. | ☐ The unit is in a valley, or st stream or river, | neet all of the following criteria? ream channel, where it gets inundated by overbank flooding from that ars at least once every 2 years. |

| Wetland name or | number: | CC |
|-----------------|---------|----|
|-----------------|---------|----|

| | NO − go to 6NOTE: The Riverine unit can contain depressions flooding | ☐ YES – The wetland class is Riverine that are filled with water when the river is not |
|----|--|--|
| 6. | Is the entire wetland unit in a topographic depressurface, at some time during the year? <i>This mean of the wetland.</i> | ssion in which water ponds, or is saturated to the as that any outlet, if present, is higher than the interior |
| | □ NO – go to 7 | \boxtimes YES – The wetland class is Depressional |
| 7. | Is the entire wetland unit located in a very flat are flooding? The unit does not pond surface water maintained by high groundwater in the area. The outlet. | • |
| | □N0 – go to 8 | \square 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 | HGM class to |
|---------------------------------------|---------------|
| being rated | use in rating |
| Slope + Riverine | Riverine |
| Slope + Depressional | Depressional |
| Slope + Lake Fringe | Lake Fringe |
| Depressional + Riverine along stream | Depressional |
| within boundary of depression | |
| Depressional + Lake Fringe | Depressional |
| Riverine + Lake Fringe | Riverine |
| Salt Water Tidal Fringe and any other | Treat as |
| class of freshwater wetland | 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.

| 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 ☐ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing stream or ditch, surface outlet that is permanently flowing stream or ditch, surface outlet that is permanently flowing stream or ditch. | points = 3 ving outlet. points = 2 | 3 |
| ☐ Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch | n. points = 1 | 0 |
| D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions). □ D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cow. □ Wetland has persistent, ungrazed, plants > 95% of area □ Wetland has persistent, ungrazed, plants > 1/2 of area □ Wetland has persistent, ungrazed plants > 1/10 of area □ Wetland has persistent, ungrazed plants < 1/10 of area | | 5 |
| 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 □ Area seasonally ponded is < ¾ total area of wetland □ Area seasonally ponded is < ¾ total area of wetland | points = 4 points = 2 points = 0 | 2 |
| Total for D 1 Add the points in the | boxes above | 10 |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 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? | s = 1 ⊠ No = 0 | 0 |
| D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? \Box Yes | s = 1 ⊠ No = 0 | 0 |
| · , | s = 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 PHS mapped waterfowl concentrations | = 1 | 1 |
| Total for D 2 Add the points in the | boxes above | 1 |
| Rating of Landscape Potential If score is: $\square 3$ or $4 = H$ $\boxtimes 1$ or $2 = M$ $\square 0 = L$ Record the | e rating on the fir | st 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? | s = 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? | s = 1 ⊠ No = 0 | 0 |
| D 3.3. Has the site been identified in a watershed or local plan as important for maintaining water qualit (answer YES if there is a TMDL for the basin in which the unit is found)? | y s = 2 □ No = 0 | 2 |
| Total for D 3 Add the points in the | boxes above | 2 |
| Rating of Value If score is: $\square 2-4 = H$ $\square 1 = M$ $\square 0 = L$ Record the rating on the first page | | |

| DEPRESSIONAL AND FLATS WETLANDS | | |
|---|------------|--|
| Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation | on | |
| 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). □ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. □ Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. □ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. points = 1 □ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. | 4 | |
| D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part. □ Marks of ponding are 3 ft or more above the surface or bottom of outlet. □ Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet. □ Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet. □ The wetland is a "headwater" wetland. □ Wetland is flat but has small depressions on the surface that trap water. □ Marks of ponding less than 0.5 ft (6 in). | 3 | |
| 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. □ The area of the basin is 10 to 100 times the area of the unit. □ The area of the basin is more than 100 times the area of the unit. □ Entire wetland is in the Flats class. | 3 | |
| Total for D 4 Add the points in the boxes above | 10 | |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 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? \square Yes = 1 \boxtimes No = 0 | 0 | |
| D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? \square Yes = 1 \square No = 0 | 0 | |
| D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? \Box Yes = 1 \boxtimes No = 0 | | |
| Total for D 5 Add the points in the boxes above | | |
| Rating of Landscape Potential If score is: $\Box 3 = H \Box 1$ or $2 = M \boxtimes 0 = L$ 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 ■ 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 | 2 | |
| ☐ Flooding from groundwater is an issue in the sub-basin. ☐ 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 | 0 | |

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

Record the rating on the first page

| These questions apply to wetlands of all HGM classes. | |
|---|---|
| HABITAT FUNCTIONS - Indicators that site functions to provide important habitat | |
| H 1.0. Does the site have the potential to provide habitat? | |
| H 1.1. Structure of plant community: Indicators are Cowardin classes and strata within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked. □ Aquatic bed □ Aquatic bed □ Scrub-shrub (areas where shrubs have > 30% cover) □ Scrub-shrub (areas where shrubs have > 30% cover) □ Structures: points = 1 □ Forested (areas where trees have > 30% cover) □ 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 | 4 |
| 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 □ Seasonally flooded or inundated □ Saturated only □ Permanently flowing stream or river in, or adjacent to, the wetland □ Seasonally flowing stream in, or adjacent to, the wetland □ Lake Fringe wetland □ Freshwater tidal wetland □ Seasonally flowing stream or river in, or adjacent to, the wetland □ Lake Fringe wetland □ Lake Fringe wetland □ Seasonally flowing stream in, or adjacent to, the wetland □ Lake Fringe wetland □ Lake Fringe wetland □ Lake Fringe wetland □ Seasonally flowing stream in, or adjacent to, the wetland □ Lake Fringe wetland | 2 |
| H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle If you counted: | 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 | 2 |

| H 1.5. Special habitat features: Check the habitat features that are present in the wetland. The number of checks is the n □ 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 exter 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 der | nds at least 3.3 ft (1 m) | 4 |
|--|-------------------------------|---------------|
| slope) OR signs of recent beaver activity are present (cut shrubs or trees that have where wood is exposed). At least ¼ ac of thin-stemmed persistent plants or woody branches are present in 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 strata). | not yet weathered as that are | |
| Total for H 1 Add the poir | nts in the boxes above | 14 |
| Rating of Site Potential If score is: □15-18 = H ⊠7-14 = M □0-6 = L | Record the rating on t | he first page |
| H 2.0. Does the landscape have the potential to support the habitat functions of the sit | :e? | |
| H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>). **Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2] = 39% + If total accessible habitat is: | | |
| | points = 3 | 3 |
| ☐ 20-33% of 1 km Polygon | points = 2 | |
| ☐ 10-19% of 1 km Polygon | points = 1 | |
| ☐ < 10% of 1 km Polygon | points = 0 | |
| H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. **Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2 = 82% + (| 14%/2) = 89% | |
| ☑ Undisturbed habitat > 50% of Polygon | points = 3 | 3 |
| ☐ Undisturbed habitat 10-50% and in 1-3 patches | points = 2 | 3 |
| ☐ Undisturbed habitat 10-50% and > 3 patches | points = 1 | |
| ☐ Undisturbed habitat < 10% of 1 km Polygon | points = 0 | |
| H 2.3. Land use intensity in 1 km Polygon: If | | |
| $\square >$ 50% of 1 km Polygon is high intensity land use | points = (- 2) | 0 |
| | points = 0 | |
| Total for H 2 Add the poir | nts in the boxes above | 6 |
| Rating of Landscape Potential If score is: $\square 4-6 = H \square 1-3 = M \square < 1 = L$ | Record the rating on th | e 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? <i>Choose o</i> | nly the highest score | |
| that applies to the wetland being rated. | m-1-4- 2 | |
| 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 | the state of federal lists) | 1 |
| ☐ It is a Wetland of High Conservation Value as determined by the Department of N | latural Resources | - |
| ☐ It has been categorized as an important habitat site in a local or regional comprel | | |
| 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 | |

Rating of Value If score is: $\Box 2 = H \boxtimes 1 = M \Box 0 = L$

Record the rating on the first page

WDFW Priority Habitats

<u>Priority habitats listed by WDFW</u> (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.

| \square 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 (<i>full descriptions in WDFW PHS report</i>). |
| \square Herbaceous Balds: Variable size patches of grass and forbs on shallow soils over bedrock. |
| \Box Old-growth/Mature forests: <u>Old-growth west of Cascade crest</u> – 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. <u>Mature forests</u> – 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 (<i>full descriptions in WDFW PHS report p. 158 – see web link above</i>). |
| \square Riparian : The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other. |
| \square Westside Prairies: Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (<i>full descriptions in WDFW PHS report p. 161 – see web link above</i>). |
| ☐ 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. (<i>full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page</i>). |
| \Box 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. |
| \Box Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation. |
| \Box Talus: Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, and or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs. |
| \boxtimes 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.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

| Wetland Type | Category |
|--|----------|
| Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met. | |
| SC 1.0. Estuarine wetlands | |
| Does the wetland meet the following criteria for Estuarine wetlands? | |
| \square The dominant water regime is tidal, | |
| \square Vegetated, and | |
| ☐ With a salinity greater than 0.5 ppt ☐ Yes –Go to SC 1.1 ☒ No= Not an estuarine wetland | |
| 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? | Cat. I |
| $\Box Yes = \textbf{Category I} \qquad \Box No - Go to \textbf{SC 1.2}$ | |
| SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? | |
| \square The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has | Cat. I |
| less than 10% cover of non-native plant species. (If non-native species are Spartina, see page 25) | |
| \square At least $lpha$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | Cat. II |
| un- mowed grassland. | Cat. II |
| ☐ The wetland has at least two of the following features: tidal channels, depressions with open water, | |
| or contiguous freshwater wetlands. \square Yes = Category I \square No= Category 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? $	extstyle 	ext$ | |
| SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? | |
| $\underline{\text{http://www.dnr.wa.gov/NHPwetlandviewer}} \qquad \qquad \Box \text{Yes} = \textbf{Category} \square \text{No} = \textbf{Not a WHCV}$ | Cat. I |
| SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? | Cuti |
| http://file.dnr.wa.gov/publications/amp_nh_wetlands_trs.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? | |
| <u> </u> | |
| SC 3.0. Bogs Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key</i> | |
| 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? \Box Yes – Go to SC 3.3 \boxtimes 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? \Box Yes – Go to SC 3.3 \boxtimes 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% | Cat. I |
| cover of plant species listed in Table 4? \Box Yes = Is a Category I bog \Box 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 | |

| 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? <i>If you answer YES you will still need to rate the wetland based on its functions.</i> □ 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). | Cat. I |
| □Yes = Category I ⊠No = Not a forested wetland for this section | |
| 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) ☐ 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). ☐ At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. ☐ The wetland is larger than ¹/₁₀ ac (4350 ft²) ☐ Yes = Category I ☐ No = Category II | Cat. 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 Ocean Shores-Copalis: Lands west of SR 115 and SR 109 Yes – Go to SC 6.1 No = not an interdunal wetland for rating | Cat I Cat. II |
| 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)? 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 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. III Cat. IV |
| Category of wetland based on Special Characteristics If you answered No for all types, enter "Not Applicable" on Summary Form | NA |

Wetland name or number: Click here to enter text.

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WETLAND RATING FORMS

AREA 3 - BOAT TRAILER PARKING LOT

Wetland H Wetland QQ

RATING SUMMARY – Western Washington

Name of wetland (or ID #): <u>H</u> Date of site visit: <u>11/24/2020</u>

Rated by: <u>Jamie Sloan and Roen Hohlfeld</u> Trained by Ecology? $\boxtimes Y \square N$ Date of training: <u>9/2017</u>

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: Google Earth, Pierce County

OVERALL WETLAND CATEGORY (based on functions ⊠ or special characteristics □)

1. Category of wetland based on FUNCTIONS

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

| FUNCTION | Improving Water Quality | | Н | ydrolo | gic | | Habita | at | | |
|------------------------|--------------------------------|---|----------|----------|-----|----------|----------|----|---|-------|
| | Circle the appropriate ratings | | | | | | | | | |
| Site Potential | Н | M | L | Н | M | L | Н | M | L | |
| Landscape Potential | Н | М | <u>L</u> | Н | М | <u>L</u> | <u>H</u> | М | L | |
| Value | <u>H</u> | М | L | <u>H</u> | М | L | Н | M | L | TOTAL |
| Score Based on Ratings | | 6 | | | 6 | | | 7 | | 19 |

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 | | \boxtimes | |

Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

| Map of: | To answer questions: | Figure # |
|---|----------------------|----------|
| Cowardin plant classes | D 1.3, H 1.1, H 1.4 | 1 |
| Hydroperiods | D 1.4, H 1.2 | 2 |
| Location of outlet (can be added to map of hydroperiods) | D 1.1, D 4.1 | 2 |
| Boundary of area within 150 ft of the wetland (can be added to another figure) | D 2.2, D 5.2 | 2 |
| Map of the contributing basin | D 4.3, D 5.3 | 3 |
| 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 | 4 |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website) | D 3.1, D 3.2 | 5 |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web) | D 3.3 | 6 |

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? | | | | |
|--|---|--|--|--|--|
| | oximes NO – go to 2 $oximes$ 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 thou | | | | | |
| | NO – Saltwater Tidal Fringe (Estuarine) If your wetland can be classified as a Freshwater Tidal Fringe use the sis Saltwater Tidal Fringe it is an Estuarine wetland and is not scored. score functions for estuarine wetlands. | | | | |
| 2. | 2. The entire wetland unit is flat and precipitation is the only source (>90 and surface water runoff are NOT sources of water to the unit. | 0%) of water to it. Groundwater | | | |
| | oxtimes NO – go to 3 $oxtimes$ YES – The If your wetland can be classified as a Flats wetland, use the form for Dep | he wetland class is Flats pressional wetlands. | | | |
| 3. | B. 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). | | | | |
| | oxtimes NO – go to 4 $oxtimes$ YES – The wetland class is Lake Fri | nge (Lacustrine Fringe) | | | |
| 4. | 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 (unidirection seeps. It may flow subsurface, as sheetflow, or in a swale without of ☑ The water leaves the wetland without being impounded. | - | | | |
| | \boxtimes NO – go to 5 \square YES – Th | e wetland class is Slope | | | |
| | NOTE : Surface water does not pond in these type of wetlands except shallow depressions or behind hummocks (depressions are usually < deep). | | | | |
| 5. | 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 stream or river, □ The overbank flooding occurs at least once every 2 years. | overbank flooding from that | | | |

| Wetland name of | or number: | Η |
|-----------------|------------|---|
|-----------------|------------|---|

| | NO – go to 6 NOTE : The Riverine unit can contain depressions flooding | ☐ YES – The wetland class is Riverine s that are filled with water when the river is not |
|----|--|--|
| 6. | Is the entire wetland unit in a topographic depressurface, at some time during the year? <i>This mean of the wetland.</i> | ssion in which water ponds, or is saturated to the ns that any outlet, if present, is higher than the interior |
| | \square NO – go to 7 | \boxtimes YES – The wetland class is Depressional |
| 7. | Is the entire wetland unit located in a very flat are flooding? The unit does not pond surface water maintained by high groundwater in the area. The outlet. | • |
| | □ NO – go to 8 | \square 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 | HGM class to |
|---------------------------------------|---------------|
| being rated | use in rating |
| Slope + Riverine | Riverine |
| Slope + Depressional | Depressional |
| Slope + Lake Fringe | Lake Fringe |
| Depressional + Riverine along stream | Depressional |
| within boundary of depression | |
| Depressional + Lake Fringe | Depressional |
| Riverine + Lake Fringe | Riverine |
| Salt Water Tidal Fringe and any other | Treat as |
| class of freshwater wetland | 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.

| DEPRESSIONAL AND FLATS WETLANDS Water Quality Functions - Indicators that the site functions to improve wat | er 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 ☐ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing ☐ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing ☐ Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. | points = 3 ng outlet. points = 2 g. points = 1 points = 1 | 3 |
| D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions). □Ye D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowar □ Wetland has persistent, ungrazed, plants > 95% of area □ Wetland has persistent, ungrazed, plants > 1/2 of area □ Wetland has persistent, ungrazed plants > 1/10 of area □ Wetland has persistent, ungrazed plants < 1/10 of area | | 5 |
| 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 □ Area seasonally ponded is > ¼ total area of wetland ⊠ Area seasonally ponded is < ¼ total area of wetland | points = 4 points = 2 points = 0 | 0 |
| Total for D 1 Add the points in the be | oxes above | 8 |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 0-5 = L Record the | e rating on the f | irst 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? | = 1 × No = 0 | 0 |
| D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? \Box Yes = | = 1 🖾 No = 0 | 0 |
| D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in | = 1 × No = 0 = 1 × No = 0 | 0 |
| Total for D 2 Add the points in the bo | | 0 |
| Rating of Landscape Potential If score is: \Box 3 or 4 = H \Box 1 or 2 = M \boxtimes 0 = L Record the | rating on the fir | st 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? | = 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? \Box 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)? | = 2 | 2 |
| Total for D 3 Add the points in the b | oxes above | 2 |
| Rating of Value If score is: $\boxtimes 2-4 = H \square 1 = M \square 0 = L$ Record the | e rating on the f | irst page |

| <u>DEPRESSIONAL AND FLATS WETLANDS</u> | |
|--|------------|
| Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation | on |
| D 4.0. Does the site have the potential to reduce flooding and erosion? | |
| D 4.1. Characteristics of surface water outflows from the wetland: ☐ Wetland is a depression or flat depression with no surface water leaving it (no outlet). points = 4 ☐ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. points = 2 ☐ Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1 ☐ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. points = 0 | 4 |
| D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part. □ Marks of ponding are 3 ft or more above the surface or bottom of outlet. □ Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet. □ Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet. □ The wetland is a "headwater" wetland. □ Wetland is flat but has small depressions on the surface that trap water. □ Marks of ponding less than 0.5 ft (6 in). | 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. ☐ The area of the basin is 10 to 100 times the area of the unit. ☐ The area of the basin is more than 100 times the area of the unit. ☐ Entire wetland is in the Flats class. | 3 |
| Total for D 4 Add the points in the boxes above | 7 |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 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? \square Yes = 1 \square No = 0 | 0 |
| D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? \square Yes = 1 \square No = 0 | 0 |
| D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? \square Yes = 1 \square No = 0 | 0 |
| Total for D 5 Add the points in the boxes above | 0 |
| Rating of Landscape Potential If score is: $\Box 3 = H$ $\Box 1$ or $2 = M$ $\boxtimes 0 = L$ 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 ■ 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. | 2 |
| D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? | 0 |
| ☐ Yes = 2 ☑ No = 0 | |
| Total for D 6 Add the points in the boxes above | 2 |

| 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 | 2 |
| that each cover 20% within the Forested polygon | |
| H 1.2. Hydroperiods Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ ac to count (see text for descriptions of hydroperiods). □ 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 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle If you counted: | 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 All three diagrams in this row are HIGH = 3points | 1 |

| | ı | | | |
|--|----------------------------|----------------|--|--|
| H 1.5. Special habitat features: | | | | |
| Check the habitat features that are present in the wetland. <i>The number of checks is the</i> | number of points. | | | |
| oxtimes 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 ext | ends 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). | | | | |
| \square Stable steep banks of fine material that might be used by beaver or muskrat for d | enning (> 30 degree | 3 | | |
| slope) OR signs of recent beaver activity are present (cut shrubs or trees that hav | e not yet weathered | | | |
| where wood is exposed). | | | | |
| ☐ At least ¼ ac of thin-stemmed persistent plants or woody branches are present in a | reas 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 (some plants of the wetland area in every stratum of plants (some plants of the wetland area in every stratum of plants (some plants of the wetland area in every stratum of plants (some plants of the wetland area in every stratum of plants of the wetland area in every stratum of plants (some plants of the wetland area in every stratum of plants (some plants of the wetland area in every stratum of plants of the wetland area in every stratum of plants (some plants of the wetland area in every stratum of plants of the wetland area in every stratum of plants (some plants of the wetland area in every stratum of the wetland area in every stratum of plants (some plants of the wetland area in every stratum of the wetland area in every stratum of the wetland area in every stratum.) | see H 1.1 for list of | | | |
| strata). | | | | |
| Total for H 1 Add the po | ints in the boxes above | 8 | | |
| Rating of Site Potential If score is: \Box 15-18 = H \boxtimes 7-14 = M \Box 0-6 = L | Record the rating on t | the first page | | |
| H 2.0. Does the landscape have the potential to support the habitat functions of the | | , . | | |
| | oite: | | | |
| H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>). | | | | |
| Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2] = 35.5 | 5% + (7%/2) = 39% | | | |
| If total accessible habitat is: | | | | |
| \boxtimes > 1/3 (33.3%) of 1 km Polygon | points = 3 | 3 | | |
| ☐ 20-33% of 1 km Polygon | points = 2 | | | |
| ☐ 10-19% of 1 km Polygon | points = 1 | | | |
| ☐ < 10% of 1 km Polygon | points = 0 | | | |
| H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. | | | | |
| Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2 = 82.5% + (15%/2) = 90% | | | | |
| | | | | |
| ☐ Undisturbed habitat 10-50% and in 1-3 patches | points = 2 | 3 | | |
| ☐ Undisturbed habitat 10-50% and > 3 patches | points = 1 | | | |
| ☐ Undisturbed habitat < 10% of 1 km Polygon | points = 0 | | | |
| H 2.3. Land use intensity in 1 km Polygon: If | pomits | | | |
| □ > 50% of 1 km Polygon is high intensity land use | points = (- 2) | 0 | | |
| | | O | | |
| | points = 0 | C | | |
| · | oints in the boxes above | 6 | | |
| Rating of Landscape Potential If score is: $\square 4-6 = H \square 1-3 = M \square < 1 = L$ | Record the rating on th | ne 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 | | | |
| \square 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) | | | | |
| \square It is mapped as a location for an individual WDFW priority species | | | | |
| \square It is a Wetland of High Conservation Value as determined by the Department of Natural Resources | | | | |
| \square 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 | | | |

Rating of Value If score is: $\Box 2 = H \boxtimes 1 = M \Box 0 = L$

Record the rating on the first page

WDFW Priority Habitats

<u>Priority habitats listed by WDFW</u> (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 (<i>full descriptions in WDFW PHS report</i>). |
| \square 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 (<i>full descriptions in WDFW PHS report p. 158 – see web link above</i>). |
| \square Riparian : The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other. |
| \square Westside Prairies: Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (<i>full descriptions in WDFW PHS report p. 161 – see web link above</i>). |
| ☐ 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. (<i>full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page</i>). |
| \Box 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. |
| \Box Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation. |
| \Box Talus: Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, and or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs. |
| \boxtimes 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.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

| Wetland Type | Category | | | |
|--|----------|--|--|--|
| Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met. | | | | |
| SC 1.0. Estuarine wetlands | | | | |
| Does the wetland meet the following criteria for Estuarine wetlands? | | | | |
| ☐ The dominant water regime is tidal, | | | | |
| \square Vegetated, and | | | | |
| ☐ With a salinity greater than 0.5 ppt ☐ Yes –Go to SC 1.1 ☒ No= Not an estuarine wetland | | | | |
| 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? | Cat. I | | | |
| Yes = Category I □ No - Go to SC 1.2 | | | | |
| 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 | Cat. I | | | |
| less than 10% cover of non-native plant species. (If non-native species are <i>Spartina</i> , see page 25) | | | | |
| | | | | |
| \square At least ${}^{3}\!\!\!\!/$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un- mowed grassland. | Cat. II | | | |
| | | | | |
| □ 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 | | | | |
| of contiguous freshwater wetlands. | | | | |
| 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? \times Yes - Go to SC 2.2 \times No - Go to SC 2.3 | | | | |
| SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? | | | | |
| http://www.dnr.wa.gov/NHPwetlandviewer □Yes = Category I ☑No = Not a WHCV | | | | |
| SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? | Cat. I | | | |
| http://file.dnr.wa.gov/publications/amp_nh_wetlands_trs.pdf | | | | |
| \Box Yes – Contact WNHP/WDNR and go to SC 2.4 \Box 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? | | | | |
| SC 3.0. Bogs | | | | |
| Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key</i> | | | | |
| 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? \Box Yes – Go to SC 3.3 \boxtimes 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? \square Yes – Go to SC 3.3 \square 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% | Cat. I | | | |
| 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 | | | | |

| 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? <i>If you answer YES you will still need to rate the wetland based on its functions.</i> □ 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). | Cat. I | | | |
| ☐Yes = Category I ⊠No = Not a forested wetland for this section | | | | |
| SC 5.0. Wetlands in Coastal Lagoons | | | | |
| Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? | | | | |
| \square 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 | | | | |
| \Box 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 | Cat. I | | | |
| bottom) | | | | |
| ☐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 | Cat. II | | | |
| less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). | | | | |
| ☐ At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | | | | |
| un- mowed grassland. \Box 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)? \emph{If} | | | | |
| you answer yes you will still need to rate the wetland based on its habitat functions. | Cat I | | | |
| In practical terms that means the following geographic areas: | | | | |
| ☐ Long Beach Peninsula: Lands west of SR 103 | | | | |
| ☐ Grayland-Westport: Lands west of SR 105 | | | | |
| \square Ocean Shores-Copalis: Lands west of SR 115 and SR 109 | Cat. II | | | |
| \square Yes – Go to SC 6.1 \square No = not an interdunal wetland for rating | out | | | |
| 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)? \Box Yes = Category I \Box No – Go to SC 6.2 | Cat. III | | | |
| SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? | | | | |
| \Box Yes = Category II \Box No – Go to SC 6.3 | | | | |
| 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? | Cat. IV | | | |
| ☐Yes = Category III ☐ No = Category IV | · | | | |
| | | | | |
| Category of wetland based on Special Characteristics | | | | |
| If you answered No for all types, enter "Not Applicable" on Summary Form | NA | | | |

Wetland name or number: Click here to enter text.

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RATING SUMMARY – Western Washington

Name of wetland (or ID #): QQ Date of site visit: 10/7/2021

Rated by: <u>Sage Presster and Roen Hohlfeld</u> Trained by Ecology? ⊠Y □N Date of training: <u>9/2017</u>

HGM Class used for rating: <u>Depressional</u> 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: Google Earth, Pierce County

OVERALL WETLAND CATEGORY (based on functions ⊠ or special characteristics □)

1. Category of wetland based on FUNCTIONS

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

| FUNCTION | Improving Water Quality | | | Hydrologic | | Habitat | | | | |
|--------------------------------|-------------------------|---|----------|------------|---|----------|----------|---|---|-------|
| Circle the appropriate ratings | | | | | | | | | | |
| Site Potential | Н | M | L | Н | M | L | Н | M | L | |
| Landscape Potential | Н | М | <u>L</u> | Н | М | <u>L</u> | <u>H</u> | М | L | |
| Value | <u>H</u> | М | L | <u>H</u> | М | L | Н | M | L | TOTAL |
| Score Based on Ratings | | 6 | | | 6 | | | 7 | | 19 |

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,L4 = 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 | | \boxtimes | |

Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

| Map of: | To answer questions: | Figure # |
|---|----------------------|----------|
| Cowardin plant classes | D 1.3, H 1.1, H 1.4 | 1 |
| Hydroperiods | D 1.4, H 1.2 | 2 |
| Location of outlet (can be added to map of hydroperiods) | D 1.1, D 4.1 | 2 |
| Boundary of area within 150 ft of the wetland (can be added to another figure) | D 2.2, D 5.2 | 2 |
| Map of the contributing basin | D 4.3, D 5.3 | 3 |
| 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 | 4 |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website) | D 3.1, D 3.2 | 5 |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web) | D 3.3 | 6 |

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 en | tire unit usually controlled by tides except during floods? |
|----|---|---|
| | ⊠N0 – go to 2 | \square YES – the wetland class is Tidal Fringe – go to 1.1 |
| 1 | 1.1 Is the salinity of the water d | uring periods of annual low flow below 0.5 ppt (parts per thousand)? |
| | | fied as a Freshwater Tidal Fringe use the forms for Riverine wetlands. If it s an Estuarine wetland and is not scored. This method cannot be used to |
| 2. | | and precipitation is the only source (>90%) of water to it. Groundwater NOT sources of water to the unit. |
| | \boxtimes NO – go to 3 If your wetland can be classified | \square YES – The wetland class is Flats ed as a Flats wetland, use the form for Depressional wetlands. |
| 3. | ☐ The vegetated part of the w plants on the surface at any | meet all of the following criteria? retland is on the shores of a body of permanent open water (without any y time of the year) at least 20 ac (8 ha) in size; ater area is deeper than 6.6 ft (2 m). |
| | ⊠N0 – go to 4 | \square YES – The wetland class is Lake Fringe (Lacustrine Fringe) |
| 4. | ☑ The wetland is on a slope (.☑ The water flows through the seeps. It may flow subsurf | meet all of the following criteria? Slope can be very gradual), e wetland in one direction (unidirectional) and usually comes from face, as sheetflow, or in a swale without distinct banks, and without being impounded. |
| | \boxtimes NO – go to 5 | \Box YES – The wetland class is Slope |
| | | ot pond in these type of wetlands except occasionally in very small and d hummocks (depressions are usually <3 ft diameter and less than 1 ft |
| 5. | ☐ The unit is in a valley, or stream or river, | meet all of the following criteria? ream channel, where it gets inundated by overbank flooding from that ars at least once every 2 years. |

| Wetland name or number: | QQ |
|-------------------------|----|
| | |

| | NO – go to 6 NOTE : The Riverine unit can contain dep flooding | \square YES – The wetland class is Riverine pressions that are filled with water when the river is not |
|----|---|---|
| 5. | 1 0 1 | ic depression in which water ponds, or is saturated to the This means that any outlet, if present, is higher than the interior |
| | □ NO – go to 7 | ∠YES – The wetland class is Depressional |
| 7. | flooding? The unit does not pond surface | ry flat area with no obvious depression and no overbank e water more than a few inches. The unit seems to be area. The wetland may be ditched, but has no obvious natural |
| | □N0 - go to 8 | \square 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 | HGM class to |
|---------------------------------------|---------------|
| being rated | use in rating |
| Slope + Riverine | Riverine |
| Slope + Depressional | Depressional |
| Slope + Lake Fringe | Lake Fringe |
| Depressional + Riverine along stream | Depressional |
| within boundary of depression | |
| Depressional + Lake Fringe | Depressional |
| Riverine + Lake Fringe | Riverine |
| Salt Water Tidal Fringe and any other | Treat as |
| class of freshwater wetland | 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.

| DEPRESSIONAL AND FLATS WETLANDS | | | | | |
|--|------------------|-----------|--|--|--|
| Water Quality Functions - Indicators that the site functions to improve water | er 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 (| | | | | |
| \square Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowin | points = 3 | 2 | | | |
| Wettand has an intermittently nowing stream of ditch, OK nightly constricted permanently nowing | points = 2 | 3 | | | |
| $\ \square$ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. | points = 1 | | | | |
| $\ \square$ 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 | s = 4 ⊠ No = 0 | 0 | | | |
| D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Coward | in classes): | | | | |
| ☑ Wetland has persistent, ungrazed, plants > 95% of area | points = 5 | | | | |
| \square Wetland has persistent, ungrazed, plants > 1/2 of area | points = 3 | 5 | | | |
| \square Wetland has persistent, ungrazed plants > 1/10 of area | points = 1 | | | | |
| \square 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. | | | | | |
| \square Area seasonally ponded is > $\frac{1}{2}$ total area of wetland | points = 4 | 0 | | | |
| ☐ Area seasonally ponded is > ¼ total area of wetland | points = 2 | | | | |
| ☑ Area seasonally ponded is < ¼ total area of wetland ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ | points = 0 | | | | |
| Total for D 1 Add the points in the box | xes above | 8 | | | |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 0-5 = L Record the rating on the first | | | | | |
| 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? \Box Yes = | 1 ⊠ No = 0 | 0 | | | |
| D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? \Box Yes = | 1 ⊠ No = 0 | 0 | | | |
| D 2.3. Are there septic systems within 250 ft of the wetland? \Box Yes = | 1 ⊠ No = 0 | 0 | | | |
| D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in | | 0 | | | |
| · | 1 ⊠ No = 0 | | | | |
| Total for D 2 Add the points in the box | xes above | 0 | | | |
| Rating of Landscape Potential If score is: $\square 3$ or $4 = H$ $\square 1$ or $2 = M$ $\boxtimes 0 = L$ Record the r | ating on the fir | st 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 | | 0 | | | |
| water that is on the 303(d) list? \square 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? \Box 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)? $	extstyle 	extstyle $ | 2 □ No = 0 | 2 | | | |
| Total for D 3 Add the points in the box | xes above | 2 | | | |
| Rating of Value If score is: $\square 2-4 = H \square 1 = M \square 0 = L$ Record the | rating on the f | irst page | | | |

| DEPRESSIONAL AND FLATS WETLANDS | |
|--|------------|
| Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation | on |
| 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). ☐ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. ☐ Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. ☐ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. D 4.1. Characteristics of surface water leaving it (no outlet). points = 4 points = 2 Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. points = 0 | 4 |
| D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part. □ Marks of ponding are 3 ft or more above the surface or bottom of outlet. points = 7 □ Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet. points = 5 □ Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet. points = 3 □ The wetland is a "headwater" wetland. points = 3 □ Wetland is flat but has small depressions on the surface that trap water. points = 1 □ Marks of ponding less than 0.5 ft (6 in). | 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. □ The area of the basin is 10 to 100 times the area of the unit. □ The area of the basin is more than 100 times the area of the unit. □ Entire wetland is in the Flats class. | 3 |
| Total for D 4 Add the points in the boxes above | 7 |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 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? \square Yes = 1 \square No = 0 | 0 |
| D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? \square Yes = 1 \square No = 0 | 0 |
| D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? ☐ Yes = 1 ☒ No = 0 | 0 |
| Total for D 5 Add the points in the boxes above | 0 |
| Rating of Landscape Potential If score is: $\Box 3 = H \Box 1$ or $2 = M \boxtimes 0 = L$ 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 ■ □ 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. | 2 |
| 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 |

| 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 | 2 |
| H 1.2. Hydroperiods | |
| Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ ac to count (see text for descriptions of hydroperiods). □ Permanently flooded or inundated □ Seasonally flooded or inundated □ Occasionally flooded or inundated □ Saturated only □ Permanently flowing stream or river in, or adjacent to, the wetland □ Seasonally flowing stream in, or adjacent to, the wetland □ Lake Fringe wetland □ Freshwater tidal wetland □ Permanently flowing stream or river in, or adjacent to, the wetland □ Lake Fringe wetland □ Permanently flowing stream in, or adjacent to, the wetland □ Lake Fringe wetland □ Permanently flowing stream in, or adjacent to, the wetland □ Lake Fringe wetland □ Permanently flowing stream in, or adjacent to, the wetland □ Lake Fringe wetland □ Permanently flowing stream in, or adjacent to, the wetland □ Lake Fringe wetland □ Permanently flowing stream in, or adjacent to, the wetland | 1 |
| H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle If you counted: > 19 species points = 2 > 5 - 19 species points = 1 < 5 species | 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 All three diagrams in this row are HIGH = 3points | 1 |

| 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). | , | | | | |
| | | | | | |
| ☐ Undercut banks are present for at least 6.6 ft (2 m) AND/OR overhanging plants exte | ends 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). | | 2 | | | |
| \square Stable steep banks of fine material that might be used by beaver or muskrat for de | | 3 | | | |
| slope) OR signs of recent beaver activity are present (cut shrubs or trees that have where wood is exposed). | not yet weathered | | | | |
| ☐ At least ¼ ac of thin-stemmed persistent plants or woody branches are present in are | eas that are | | | | |
| permanently or seasonally inundated (structures for egg-laying by amphibians). | | | | | |
| oxtimes Invasive plants cover less than 25% of the wetland area in every stratum of plants (see | ee H 1.1 for list of | | | | |
| strata). | | | | | |
| Total for H 1 Add the poi | nts in the boxes above | 8 | | | |
| Rating of Site Potential If score is: \Box 15-18 = H \boxtimes 7-14 = M \Box 0-6 = L | Record the rating on t | he first page | | | |
| H 2.0. Does the landscape have the potential to support the habitat functions of the si | te? | | | | |
| H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit). | | | | | |
| Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2] = 48% | + (7%/2) = 51.5% | | | | |
| If total accessible habitat is: | | | | | |
| | points = 3 | 3 | | | |
| ☐ 20-33% of 1 km Polygon | points = 2 | | | | |
| ☐ 10-19% of 1 km Polygon | points = 1 | | | | |
| \square < 10% of 1 km Polygon | points = 0 | | | | |
| 1-2 | points = 0 | | | | |
| H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. **Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2 = 84% + 10 | (140/ /2) = 019/ | | | | |
| | | | | | |
| ☐ Undisturbed habitat > 50% of Polygon | points = 3 | 3 | | | |
| ☐ Undisturbed habitat 10-50% and in 1-3 patches | points = 2 | | | | |
| ☐ Undisturbed habitat 10-50% and > 3 patches | points = 1 | | | | |
| ☐ Undisturbed habitat < 10% of 1 km Polygon | points = 0 | | | | |
| H 2.3. Land use intensity in 1 km Polygon: If | | | | | |
| $\square >$ 50% of 1 km Polygon is high intensity land use | points = (- 2) | 0 | | | |
| | points = 0 | | | | |
| Total for H 2 Add the poi | nts in the boxes above | 6 | | | |
| Rating of Landscape Potential If score is: $\square 4-6 = H \square 1-3 = M \square < 1 = L$ | Record the rating on th | e 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 of | only the highest score | | | | |
| that applies to the wetland being rated. | | | | | |
| Site meets ANY of the following criteria: | points = 2 | | | | |
| \square It has 3 or more priority habitats within 100 m (see next page) | | | | | |
| \square It provides habitat for Threatened or Endangered species (any plant or animal or | the state or federal lists) | 1 | | | |
| ☐ 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 I | | | | | |
| ☐ It has been categorized as an important habitat site in a local or regional compre | hensive 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 | | | | |

Rating of Value If score is: $\Box 2 = H \boxtimes 1 = M \Box 0 = L$

Record the rating on the first page

WDFW Priority Habitats

<u>Priority habitats listed by WDFW</u> (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.

| \square 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 (<i>full descriptions in WDFW PHS report</i>). |
| \square Herbaceous Balds: Variable size patches of grass and forbs on shallow soils over bedrock. |
| \Box Old-growth/Mature forests: <u>Old-growth west of Cascade crest</u> – 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. <u>Mature forests</u> – 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 (<i>full descriptions in WDFW PHS report p. 158 – see web link above</i>). |
| \square Riparian : The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other. |
| \square Westside Prairies: Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (<i>full descriptions in WDFW PHS report p. 161 – see web link above</i>). |
| ☐ 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. (<i>full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page</i>). |
| \Box 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. |
| \Box Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation. |
| \Box Talus: Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, and or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs. |
| \boxtimes 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.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

| Wetland Type | Category |
|--|----------|
| Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met. | |
| SC 1.0. Estuarine wetlands | |
| Does the wetland meet the following criteria for Estuarine wetlands? | |
| ☐ The dominant water regime is tidal, | |
| \square Vegetated, and | |
| ☐ With a salinity greater than 0.5 ppt ☐ Yes –Go to SC 1.1 ☒ No= Not an estuarine wetland | |
| 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? | Cat. I |
| Yes = Category I □ No - Go to SC 1.2 | |
| 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 | Cat. I |
| less than 10% cover of non-native plant species. (If non-native species are <i>Spartina</i> , see page 25) | |
| | |
| \square At least ${}^{3}\!\!\!\!/$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un- mowed grassland. | Cat. II |
| | |
| □ 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 | |
| of contiguous freshwater wetlands. | |
| 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? \times Yes - Go to SC 2.2 \times No - Go to SC 2.3 | |
| SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? | |
| http://www.dnr.wa.gov/NHPwetlandviewer □Yes = Category I ☑No = Not a WHCV | |
| SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? | Cat. I |
| http://file.dnr.wa.gov/publications/amp_nh_wetlands_trs.pdf | |
| \Box Yes – Contact WNHP/WDNR and go to SC 2.4 \Box 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? | |
| SC 3.0. Bogs | |
| Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key</i> | |
| 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? \Box Yes – Go to SC 3.3 \boxtimes 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? \Box Yes – Go to SC 3.3 \boxtimes 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% | Cat. I |
| 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 | |

| 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? <i>If you answer YES you will still need to rate the wetland based on its functions.</i> ☐ 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). | 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 | |
| \square 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 | Cat. I |
| bottom) | |
| ☐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? | Cat. II |
| ☐ The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has | |
| less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). ☐ At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | |
| un- mowed grassland. | |
| $\Box \text{ The wetland is larger than } ^{1}/_{10} \text{ ac } (4350 \text{ ft}^{2})$ | |
| □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: | Cat I |
| ☐ Long Beach Peninsula: Lands west of SR 103 | |
| ☐ Grayland-Westport: Lands west of SR 105 | |
| ☐ Ocean Shores-Copalis: Lands west of SR 115 and SR 109 | Cat. II |
| \square Yes – Go to SC 6.1 \square No = not an interdunal wetland for rating | Cut. II |
| 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)? \Box Yes = Category I \Box No – Go to SC 6.2 | Cat. III |
| 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 | |
| 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? | Cat. IV |
| ☐Yes = Category III ☐ No = Category IV | |
| | |
| Category of wetland based on Special Characteristics | |
| If you answered No for all types, enter "Not Applicable" on Summary Form | NA |

Wetland name or number: Click here to enter text.

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WETLAND RATING FORMS

AREA 4 – TRAILHEAD, OVERLOOKS, AND BOARDWALK

Wetland GG Wetland HH Wetland FFF

RATING SUMMARY – Western Washington

Name of wetland (or ID #): GG Date of site visit: 11/23/2020

Rated by: <u>Jamie Sloan and Roen Hohlfeld</u> Trained by Ecology? \boxtimes Y \square N Date of training: <u>9/2017</u>

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: Google Earth, Pierce County

OVERALL WETLAND CATEGORY (based on functions ⊠ or special characteristics □)

1. Category of wetland based on FUNCTIONS

- ☐ Category I Total score = 23 27
- ☐ Category III Total score = 16 19
- ☐ Category IV Total score = 9 15

| FUNCTION | Improving Water Quality | | Hydrologic | | Habitat | | | | | |
|------------------------|-------------------------|---|------------|----------|---------|----------|----------|---------|-------|-------|
| | | | | | Circle | the ap | propr | iate ra | tings | |
| Site Potential | Н | M | L | Н | M | L | Н | M | L | |
| Landscape Potential | Н | М | <u>L</u> | Н | М | <u>L</u> | <u>H</u> | М | L | |
| Value | <u>H</u> | М | L | <u>H</u> | М | L | <u>H</u> | М | L | TOTAL |
| Score Based on Ratings | | 6 | | | 6 | | | 8 | | 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,L4 = 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 | | \boxtimes | |

Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

| Map of: | To answer questions: | Figure # |
|---|----------------------|----------|
| Cowardin plant classes | D 1.3, H 1.1, H 1.4 | 1 |
| Hydroperiods | D 1.4, H 1.2 | 2 |
| Location of outlet (can be added to map of hydroperiods) | D 1.1, D 4.1 | 2 |
| Boundary of area within 150 ft of the wetland (can be added to another figure) | D 2.2, D 5.2 | 2 |
| Map of the contributing basin | D 4.3, D 5.3 | 3 |
| 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 | 4 |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website) | D 3.1, D 3.2 | 5 |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web) | D 3.3 | 6 |

HGM Classification of Wetlands in Western Washington

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you

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

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? \boxtimes NO – go to 2 \square **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. **YES** - The wetland class is **Flats** \boxtimes NO – go to 3 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; \square At least 30% of the open water area is deeper than 6.6 ft (2 m). \boxtimes NO – go to 4 □**YES** - The wetland class is **Lake Fringe** (Lacustrine Fringe)

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).

☑ 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.

| 5. | Does the | e entire w | etland uni | t meet all of | the foll | owing | criteri | ia? | | |
|----|----------|------------|------------|----------------------|----------|-------|---------|-----|-------|---|
| | | | | _ | | | | _ | _ | _ |

 \Box The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,

 \Box The overbank flooding occurs at least once every 2 years.

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 leaves the wetland **without being impounded**.

 \boxtimes NO – go to 5

 \square **YES** - The wetland class is **Slope**

| Wetland name or nu | mber: (| iG |
|--------------------|---------|----|
|--------------------|---------|----|

| | ⋈NO – go to 6NOTE: The Riverine unit can contain depression flooding | \square YES – The wetland class is Riverine as that are filled with water when the river is not | | | |
|----|---|--|--|--|--|
| 6. | 1 9 1 | tire wetland unit in a topographic depression in which water ponds, or is saturated to the at some time during the year? This means that any outlet, if present, is higher than the interioutland. | | | |
| | \square NO – go to 7 | $oxtimes \mathbf{YES}$ – The wetland class is Depressional | | | |
| 7. | s the entire wetland unit located in a very flat area with no obvious depression and no overbank looding? The unit does not pond surface water more than a few inches. The unit seems to be naintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet. | | | | |
| | □NO – go to 8 | \square 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 | HGM class to |
|---------------------------------------|---------------|
| being rated | use in rating |
| Slope + Riverine | Riverine |
| Slope + Depressional | Depressional |
| Slope + Lake Fringe | Lake Fringe |
| Depressional + Riverine along stream | Depressional |
| within boundary of depression | |
| Depressional + Lake Fringe | Depressional |
| Riverine + Lake Fringe | Riverine |
| Salt Water Tidal Fringe and any other | Treat as |
| class of freshwater wetland | 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.

| <u>DEPRESSIONAL AND FLATS WETLANDS</u> Water Quality Functions - Indicators that the site functions to improve water quality | | | | |
|---|--|-----------|--|--|
| D 1.0. Does the site have the potential to improve water quality? | | | | |
| D 1.1. Characteristics of surface water outflows from the wetland: ☐ Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). ☐ points = 3 ☐ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. ☐ points = 2 ☐ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. points = 1 | | | | |
| ☐ Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions). ☐ Yes | points = 1 $es = 4 \bowtie No = 0$ | 0 | | |
| D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowar | | 5 | | |
| 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 □ Area seasonally ponded is > ½ total area of wetland □ Area seasonally ponded is < ¼ total area of wetland | points = 4 points = 2 points = 0 | 2 | | |
| Total for D 1 Add the points in the bo | oxes above | 10 | | |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 0-5 = L Record the rating on the first | | | | |
| 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? | = 1 × No = 0 | 0 | | |
| D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? \Box Yes = | = 1 ⊠ No = 0 | 0 | | |
| D 2.3. Are there septic systems within 250 ft of the wetland? | = 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: | : 1 ⊠ No = 0 | 0 | | |
| Total for D 2 Add the points in the bo | oxes above | 0 | | |
| Rating of Landscape Potential If score is: $\square 3$ or $4 = H$ $\square 1$ or $2 = M$ $\boxtimes 0 = L$ 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? | = 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? \Box 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)? | | | | |
| Total for D 3 Add the points in the bo | oxes above | 2 | | |
| Rating of Value If score is: $\square 2-4 = H \square 1 = M \square 0 = L$ Record th | e rating on the f | irst page | | |

| <u>DEPRESSIONAL AND FLATS WETLANDS</u> | | | | |
|--|------------|--|--|--|
| Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradati | on | | | |
| D 4.0. Does the site have the potential to reduce flooding and erosion? | | | | |
| D 4.1. Characteristics of surface water outflows from the wetland: ☐ Wetland is a depression or flat depression with no surface water leaving it (no outlet). points = 4 ☐ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. points = 2 ☐ Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1 ☐ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. points = 0 | 4 | | | |
| D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part. □ Marks of ponding are 3 ft or more above the surface or bottom of outlet. □ Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet. □ Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet. □ The wetland is a "headwater" wetland. □ Wetland is flat but has small depressions on the surface that trap water. □ Marks of ponding less than 0.5 ft (6 in). | 3 | | | |
| 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. □ The area of the basin is 10 to 100 times the area of the unit. □ The area of the basin is more than 100 times the area of the unit. □ Entire wetland is in the Flats class. | 3 | | | |
| Total for D 4 Add the points in the boxes above | 10 | | | |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 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? \square Yes = 1 \square No = 0 | 0 | | | |
| D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? \square Yes = 1 \square No = 0 | 0 | | | |
| D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? \square Yes = 1 \square No = 0 | 0 | | | |
| Total for D 5 Add the points in the boxes above | 0 | | | |
| Rating of Landscape Potential If score is: $\Box 3 = H \Box 1$ or $2 = M \boxtimes 0 = L$ 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 ■ □ 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. | 2 | | | |
| D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? | | | | |
| | 0 | | | |
| Add the neight in the hover shows | 2 | | | |

| 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 | 2 |
| H 1.2. Hydroperiods Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or 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 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle If you counted: > 19 species points = 2 5 - 19 species points = 1 < 5 species points = 0 | 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 All three diagrams in this row are HIGH = 3points | 1 |

| H 1.5. Special habitat features: | | |
|---|----------------------------|---------------|
| Check the habitat features that are present in the wetland. The number of checks is the nu | ımber of points. | |
| ☑ Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long). | | |
| | | |
| ☐ Undercut banks are present for at least 6.6 ft (2 m) AND/OR overhanging plants exten | ds 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). | | |
| \square Stable steep banks of fine material that might be used by beaver or muskrat for deni | ning (> 30 degree | 3 |
| slope) OR signs of recent beaver activity are present (cut shrubs or trees that have r where wood is exposed). | not yet weathered | |
| ☐ At least ¼ ac of thin-stemmed persistent plants or woody branches are present in area | s that are | |
| permanently or seasonally inundated (structures for egg-laying by amphibians). | | |
| | H 1.1 for list of | |
| strata). | , | |
| Total for H 1 Add the point | ts in the boxes above | 8 |
| Rating of Site Potential If score is: \Box 15-18 = H \boxtimes 7-14 = M \Box 0-6 = L | Record the rating on t | he first page |
| H 2.0. Does the landscape have the potential to support the habitat functions of the site | 2? | |
| H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit). | | |
| Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2] = 69% + | (1%/2) = 69.5% | |
| If total accessible habitat is: | | |
| | points = 3 | 3 |
| ☐ 20-33% of 1 km Polygon | points = 2 | J |
| ☐ 10-19% of 1 km Polygon | points = 1 | |
| ☐ <10% of 1 km Polygon | points = 0 | |
| H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. | points = 0 | |
| Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2 = 95% + (2 | 5%/2) = 96.25% | |
| | | |
| ☐ Undisturbed habitat > 50% of Polygon | points = 3 | 3 |
| ☐ Undisturbed habitat 10-50% and in 1-3 patches | points = 2 | |
| ☐ Undisturbed habitat 10-50% and > 3 patches | points = 1 | |
| ☐ Undisturbed habitat < 10% of 1 km Polygon | points = 0 | |
| H 2.3. Land use intensity in 1 km Polygon: If | | 0 |
| □ > 50% of 1 km Polygon is high intensity land use | points = (- 2) | 0 |
| | points = 0 | _ |
| · | ts in the boxes above | 6 |
| Rating of Landscape Potential If score is: $\square 4-6 = H \square 1-3 = M \square < 1 = L$ | Record the rating on th | e 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 or | ly the highest score | |
| that applies to the wetland being rated. | | |
| Site meets ANY of the following criteria: | points = 2 | |
| $oxtimes_{-}$ It has 3 or more priority habitats within 100 m (see next page) | | |
| \square It provides habitat for Threatened or Endangered species (any plant or animal on t | he state or federal lists) | |
| ☐ It is mapped as a location for an individual WDFW priority species | | 2 |
| ☐ It is a Wetland of High Conservation Value as determined by the Department of Na | | |
| ☐ It has been categorized as an important habitat site in a local or regional compreh | ensive 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☐ Site does not meet any of the criteria above | points = 1 points = 0 | |
| Pating of Value of score is: \(\times 2 - H \) \(\times 1 - M \) \(\times 0 - I \) | Pacard the rating on | |

Rating of Value If score is: $\boxtimes 2 = H \square 1 = M \square 0 = L$

Record the rating on the first page

WDFW Priority Habitats

<u>Priority habitats listed by WDFW</u> (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). |
|---|
| \boxtimes Biodiversity Areas and Corridors : Areas of habitat that are relatively important to various species of native fish and wildlife (<i>full descriptions in WDFW PHS report</i>). |
| \square Herbaceous Balds: Variable size patches of grass and forbs on shallow soils over bedrock. |
| \boxtimes 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 (<i>full descriptions in WDFW PHS report p. 158 – see web link above</i>). |
| \boxtimes Riparian : The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other. |
| \square Westside Prairies: Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (<i>full descriptions in WDFW PHS report p. 161 – see web link above</i>). |
| ☑ 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. (<i>full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page</i>). |
| \Box 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. |
| \Box Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation. |
| \Box Talus: Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, and or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs. |
| \boxtimes 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.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

| Wetland Type | Category |
|--|----------|
| Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met. | |
| SC 1.0. Estuarine wetlands | |
| Does the wetland meet the following criteria for Estuarine wetlands? | |
| \square 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 | |
| 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? | Cat. I |
| \Box Yes = Category I \Box No - Go to SC 1.2 | Cut. 1 |
| | |
| SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? | Cat. I |
| ☐ The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has | Cat. i |
| less than 10% cover of non-native plant species. (If non-native species are <i>Spartina</i> , see page 25) | |
| \square At least $lpha$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | Cat. II |
| un- mowed grassland. | Cat. II |
| \square 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 | |
| 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? | |
| — | |
| SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? | |
| http://www.dnr.wa.gov/NHPwetlandviewer □Yes = Category I □No = Not a WHCV | Cat. I |
| SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? | |
| http://file.dnr.wa.gov/publications/amp_nh_wetlands_trs.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? | |
| <u> </u> | |
| 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? \Box Yes – Go to SC 3.3 \boxtimes 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? \Box Yes – Go to SC 3.3 \boxtimes 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% | Cat. I |
| 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 | |

| 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? <i>If you answer YES you will still need to rate the wetland based on its functions.</i> 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). | Cat. I | |
| ☐Yes = Category I ☐No = Not a forested wetland for this section | | |
| SC 5.0. Wetlands in Coastal Lagoons | | |
| Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? | | |
| \square 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 | Cat. I | |
| bottom) | | |
| ☐ 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? | Cat. II | |
| ☐ The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has | | |
| less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). ☐ At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | | |
| un- mowed grassland. | | |
| $\Box \text{ The wetland is larger than } ^{1}/_{10} \text{ ac } (4350 \text{ ft}^{2})$ | | |
| □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: | Cat I | |
| ☐ Long Beach Peninsula: Lands west of SR 103 | | |
| ☐ Grayland-Westport: Lands west of SR 105 | | |
| ☐ Ocean Shores-Copalis: Lands west of SR 115 and SR 109 | Cat. II | |
| □Yes – Go to SC 6.1 ⊠No = not an interdunal wetland for rating | Cat. II | |
| 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)? \Box Yes = Category I \Box No – Go to SC 6.2 | Cat. III | |
| SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? | Cat. III | |
| □Yes = Category II □No – Go to SC 6.3 | | |
| 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? | Cat. IV | |
| ☐Yes = Category III ☐ No = Category IV | 333.11 | |
| | | |
| Category of wetland based on Special Characteristics | | |
| If you answered No for all types, enter "Not Applicable" on Summary Form | NA | |

Wetland name or number: Click here to enter text.

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RATING SUMMARY – Western Washington

Name of wetland (or ID #): HH Date of site visit: 11/23/2020

Rated by: Jamie Sloan and Roen Hohlfeld Trained by Ecology? ⊠Y □N Date of training: 9/2017

HGM Class used for rating: Depressional Wetland has multiple HGM classes? \square Y \boxtimes N

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

OVERALL WETLAND CATEGORY (based on functions ⊠ or special characteristics □)

1. Category of wetland based on FUNCTIONS

- ☐ Category I Total score = 23 27
- Category II – Total score = 20 - 22
- ☐ Category IV Total score = 9 15

| FUNCTION | Improving Water Quality | | Н | Hydrologic | | Habitat | | | | |
|------------------------|----------------------------|---|----------|------------|--------|----------|----------|---------|----------|-------|
| | | | | | Circle | the ap | propr | iate ra | tings | |
| Site Potential | Н | M | L | Н | M | L | Н | М | <u>L</u> | |
| Landscape Potential | Н | М | <u>L</u> | Н | М | <u>L</u> | <u>H</u> | М | L | |
| Value | <u>H</u> | М | L | <u>H</u> | М | L | <u>H</u> | М | L | TOTAL |
| Score Based on Ratings | | 6 | | | 6 | | | 7 | | 19 |

Score for each function based on three ratings (order of ratings is not *important)* 9 = H,H,H8 = H,H,M7 = H,H,L7 = H,M,M

- 6 = H,M,L6 = 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 | CATI | GORY |
|------------------------------------|------|-------------|
| 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 | | \boxtimes |

Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

| Map of: | To answer questions: | Figure # |
|---|----------------------|----------|
| Cowardin plant classes | D 1.3, H 1.1, H 1.4 | 1 |
| Hydroperiods | D 1.4, H 1.2 | 2 |
| Location of outlet (can be added to map of hydroperiods) | D 1.1, D 4.1 | 2 |
| Boundary of area within 150 ft of the wetland (can be added to another figure) | D 2.2, D 5.2 | 2 |
| Map of the contributing basin | D 4.3, D 5.3 | 3 |
| 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 | 4 |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website) | D 3.1, D 3.2 | 5 |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web) | D 3.3 | 6 |

HGM Classification of Wetlands in Western Washington

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

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

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?

□ 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)

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.

□ YES – The wetland class is Flats

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

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

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

 \square At least 30% of the open water area is deeper than 6.6 ft (2 m).

plants on the surface at any time of the year) at least 20 ac (8 ha) in size;

- \boxtimes 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 vegetated part of the wetland is on the shores of a body of permanent open water (without any

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

⊠ The water leaves the wetland **without being impounded**.

 \boxtimes NO – go to 5

 \boxtimes NO – go to 4

 \square **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 r | name or | number: | HH |
|-----------|---------|---------|----|
|-----------|---------|---------|----|

| | NO – go to 6 NOTE : The Riverine unit can contain depression flooding | □ YES – The wetland class is Riverine is that are filled with water when the river is not |
|----|---|--|
| 6. | 1 0 1 | ession in which water ponds, or is saturated to the ans that any outlet, if present, is higher than the interior |
| | \square NO – go to 7 | oxtimes YES – The wetland class is Depressional |
| 7. | Is the entire wetland unit located in a very flat at flooding? The unit does not pond surface water maintained by high groundwater in the area. Thoutlet. | • |
| | □ NO – go to 8 | \square 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 | Depressional |
| within boundary of depression | |
| Depressional + Lake Fringe | Depressional |
| Riverine + Lake Fringe | Riverine |
| Salt Water Tidal Fringe and any other | Treat as |
| class of freshwater wetland | 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.

| DEPRESSIONAL AND FLATS WETLANDS | | | |
|--|-------------------|-----------|--|
| Water Quality Functions - Indicators that the site functions to improve water | er 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 (| | | |
| ☐ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowin | points = 3 | 2 | |
| wedand has an intermittently nowing stream of ditch, Ok highly constructed permanently nowin | points = 2 | 3 | |
| $\ \square$ 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). \square Yes | s = 4 ⊠ No = 0 | 0 | |
| D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Coward | lin classes): | | |
| ☑ Wetland has persistent, ungrazed, plants > 95% of area | points = 5 | | |
| ☐ Wetland has persistent, ungrazed, plants > 1/2 of area | points = 3 | 5 | |
| \square Wetland has persistent, ungrazed plants > 1/10 of area | points = 1 | | |
| ☐ Wetland has persistent, ungrazed plants < 1/10 of area | points = 0 | | |
| D 1.4. Characteristics of seasonal ponding or inundation: | | | |
| This is the area that is ponded for at least 2 months. See description in manual. | | | |
| ☐ Area seasonally ponded is > ½ total area of wetland | points = 4 | 0 | |
| ☐ Area seasonally ponded is > ¼ total area of wetland | points = 2 | | |
| | points = 0 | | |
| Total for D 1 Add the points in the bo | xes above | 8 | |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 0-5 = L Record the | rating on the f | irst 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? | 1 ⊠ No = 0 | 0 | |
| D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? \Box Yes = | 1 ⊠ No = 0 | 0 | |
| D 2.3. Are there septic systems within 250 ft of the wetland? \Box Yes = | 1 ⊠ No = 0 | 0 | |
| D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in | | 0 | |
| • | 1 ⊠ No = 0 | | |
| Total for D 2 Add the points in the bo | xes above | 0 | |
| Rating of Landscape Potential If score is: $\Box 3$ or $4 = H$ $\Box 1$ or $2 = M$ $\boxtimes 0 = L$ Record the A | rating on the fir | st 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 | | 0 | |
| water that is on the 303(d) list? \square 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? \Box 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)? $	exttt{	extt{	exttt{	extt{	exttt{	ex}\exitt{\exitt{\exitt{\exitt{\exitt{\exitt{\exitt{	exttt{	e$ | 2 □ No = 0 | 2 | |
| Total for D 3 Add the points in the bo | xes above | 2 | |
| Rating of Value If score is: $\boxtimes 2-4 = H \square 1 = M \square 0 = L$ Record the | rating on the f | irst paae | |

| DEPRESSIONAL AND FLATS WETLANDS | | | | |
|--|--------------|--|--|--|
| Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation | | | | |
| D 4.0. Does the site have the potential to reduce flooding and erosion? | | | | |
| D 4.1. Characteristics of surface water outflows from the wetland: ☐ Wetland is a depression or flat depression with no surface water leaving it (no outlet). points = 4 ☐ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. points = 2 ☐ Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1 ☐ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. points = 0 | 4 | | | |
| D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part. □ Marks of ponding are 3 ft or more above the surface or bottom of outlet. □ Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet. □ Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet. □ The wetland is a "headwater" wetland. □ Wetland is flat but has small depressions on the surface that trap water. □ Marks of ponding less than 0.5 ft (6 in). | 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. □ The area of the basin is 10 to 100 times the area of the unit. □ The area of the basin is more than 100 times the area of the unit. □ Entire wetland is in the Flats class. | 3 | | | |
| Total for D 4 Add the points in the boxes above | 7 | | | |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 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? \square Yes = 1 \square No = 0 | 0 | | | |
| D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? \square Yes = 1 \square No = 0 | 0 | | | |
| D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? | 0 | | | |
| Total for D 5 Add the points in the boxes above | 0 | | | |
| Rating of Landscape Potential If score is: $\Box 3 = H$ $\Box 1$ or $2 = M$ $\boxtimes 0 = L$ 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 ■ □ 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 | 2 | | | |
| ☐ 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: $\square 2-4 = H$ $\square 1 = M$ $\square 0 = L$ Record the rating on the | r Jirst page | | | |

These questions apply to wetlands of all HGM classes. **HABITAT FUNCTIONS** - Indicators that site functions to provide important habitat H 1.0. Does the site have the potential to provide habitat? H 1.1. Structure of plant community: Indicators are Cowardin classes and strata within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked. ☐ Aquatic bed 4 structures or more: points = 4 3 structures: points = 2 1 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 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 1 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 H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle 1 If you counted: \square > 19 species points = 2 points = 1 \Box < 5 species points = 0 H 1.4. Interspersion of habitats Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. If you have four or more plant classes or three classes and open water, the rating is always high. 1 \square None = 0 points ☐ **Moderate** = 2 points \boxtimes Low = 1 point All three diagrams in this row are ☐ **HIGH** = 3points

| H 1.5. Special habitat features: Check the habitat features that are present in the wetland. The number of Large, downed, woody debris within the wetland (> 4 in diameter and Standing snags (dbh > 4 in) within the wetland. Undercut banks are present for at least 6.6 ft (2 m) AND/OR overhang over a stream (or ditch) in, or contiguous with the wetland, for at least Stable steep banks of fine material that might be used by beaver or slope) OR signs of recent beaver activity are present (cut shrubs or twhere wood is exposed). □ At least ¼ ac of thin-stemmed persistent plants or woody branches are permanently or seasonally inundated (structures for egg-laying by am □ Invasive plants cover less than 25% of the wetland area in every stratustrata). Total for H 1 | 6 ft long). ging plants extends at least 3.3 ft (1 m) t 33 ft (10 m). muskrat for denning (> 30 degree trees that have not yet weathered e present in areas that are phibians). | 0 |
|--|--|---------------|
| Rating of Site Potential If score is: \Box 15-18 = H \Box 7-14 = M \boxtimes 0-6 = L | Record the rating on t | · |
| H 2.0. Does the landscape have the potential to support the habitat func | - | |
| H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit). Calculate: % undisturbed habitat + [(%moderate and low intensity land using lift total accessible habitat is: > 1/3 (33.3%) of 1 km Polygon 20-33% of 1 km Polygon 10-19% of 1 km Polygon <10% of 1 km Polygon 410. Undisturbed habitat in 1 km Polygon around the wetland. Calculate: % undisturbed habitat + [(%moderate and low intensity land using Undisturbed habitat > 50% of Polygon Undisturbed habitat 10-50% and in 1-3 patches Undisturbed habitat 10-50% and > 3 patches Undisturbed habitat 10-50% and > 3 patches Undisturbed habitat < 10% of 1 km Polygon H 2.3. Land use intensity in 1 km Polygon: If > 50% of 1 km Polygon is high intensity land use ≤ 50% of 1 km Polygon is high intensity | points = 3 points = 2 points = 1 points = 0 | 3 |
| Total for H 2 | Add the points in the boxes above | 6 |
| Rating of Landscape Potential If score is: | Record the rating on th | ne 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 po | licies? Choose only the highest score | |
| that applies to the wetland being rated. Site meets ANY of the following criteria: □ It has 3 or more priority habitats within 100 m (see next page) □ It provides habitat for Threatened or Endangered species (any pla □ It is mapped as a location for an individual WDFW priority species □ It is a Wetland of High Conservation Value as determined by the D □ It has been categorized as an important habitat site in a local or rein a Shoreline Master Plan, or in a watershed plan □ Site has 1 or 2 priority habitats (listed on next page) within 100 m □ Site does not meet any of the criteria above | epartment of Natural Resources | 2 |

Rating of Value If score is: $\boxtimes 2 = H \square 1 = M \square 0 = L$

Record the rating on the first page

WDFW Priority Habitats

<u>Priority habitats listed by WDFW</u> (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). |
|---|
| \boxtimes Biodiversity Areas and Corridors : Areas of habitat that are relatively important to various species of native fish and wildlife (<i>full descriptions in WDFW PHS report</i>). |
| \square 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 (<i>full descriptions in WDFW PHS report p. 158 – see web link above</i>). |
| \boxtimes Riparian : The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other. |
| \square Westside Prairies: Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (<i>full descriptions in WDFW PHS report p. 161 – see web link above</i>). |
| ☑ 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. (<i>full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page</i>). |
| \Box 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. |
| \Box Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation. |
| \Box Talus: Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, and or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs. |
| \boxtimes 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.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

| Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met. | |
|---|---------|
| SC 1.0. Estuarine wetlands | |
| Does the wetland meet the following criteria for Estuarine wetlands? | |
| ☐ The dominant water regime is tidal, | |
| ☐ Vegetated, and | |
| ☐ With a salinity greater than 0.5 ppt ☐ Yes —Go to SC 1.1 ☒ No= Not an estuarine wetland | |
| 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? | Cat. I |
| \square Yes = Category I \square No - Go to SC 1.2 | |
| SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? | |
| | Cat. I |
| 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. | Cat. II |
| \square The wetland has at least two of the following features: tidal channels, depressions with open water, | |
| or contiguous freshwater wetlands. \square Yes = Category I \square No= Category 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? Solution Solution | |
| SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? | |
| http://www.dnr.wa.gov/NHPwetlandviewer □Yes = Category I □No = Not a WHCV | |
| SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? | Cat. I |
| http://file.dnr.wa.gov/publications/amp_nh_wetlands_trs.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? | |
| SC 3.0. Bogs | |
| Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key</i> | |
| 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? \Box Yes – Go to SC 3.3 \boxtimes 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? $\Box Yes - Go to SC 3.3 \boxtimes No = Is not a bog$ | |
| , , , , , , , , , , , , , , , , , , , | Cat. I |
| cover of plant species listed in Table 4? \Box Yes = Is a Category I bog \Box 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? | |
| species (or combination of species) listed in Table 4 provide more than 50% of the cover under the carbopy: $\Box \text{Yes} = \text{Is a Category I bog} \qquad \Box \text{No} = \text{Is not a}$ | |

| 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? <i>If you answer YES you will still need to rate the wetland based on its functions.</i> □ 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). | Cat. I |
| ☐Yes = Category I ☐No = Not a forested wetland for this section | |
| SC 5.0. Wetlands in Coastal Lagoons | |
| Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? | |
| \Box 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 | Cat. I |
| bottom) | . |
| ☐ 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? | |
| \square The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has | Cat. II |
| less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). | |
| \square At least $rac{3}{4}$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | |
| un- mowed grassland. \Box 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: | Cat I |
| ☐ Long Beach Peninsula: Lands west of SR 103 | |
| ☐ Grayland-Westport: Lands west of SR 105 | |
| \square Ocean Shores-Copalis: Lands west of SR 115 and SR 109 | Cat. II |
| \square Yes – Go to SC 6.1 \square No = not an interdunal wetland for rating | Cat. II |
| 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)? \Box Yes = Category I \Box No – Go to SC 6.2 | Cat. III |
| 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 | |
| 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 |
| Tes - Category III LINO - Category IV | |
| | |
| Category of wetland based on Special Characteristics | NI A |
| If you answered No for all types, enter "Not Applicable" on Summary Form | NA |

Wetland name or number: Click here to enter text.

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RATING SUMMARY – Western Washington

Name of wetland (or ID #): FFF Date of site visit: 9/17/2021

Rated by: Katy Crandall and Roen Hohlfeld Trained by Ecology? \boxtimes Y \square N Date of training: 9/2017

HGM Class used for rating: <u>Depressional</u> 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: Google Earth, Pierce County

OVERALL WETLAND CATEGORY (based on functions ⊠ or special characteristics □)

1. Category of wetland based on FUNCTIONS

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

| FUNCTION | Improving Water Quality | | Hydrologic | | Habitat | | | | | |
|------------------------|-------------------------|---|------------|----------|---------|----------|----------|---------|----------|-------|
| | | | | | Circle | the ap | propr | iate ra | tings | |
| Site Potential | Н | M | L | Н | M | L | Н | М | <u>L</u> | |
| Landscape Potential | Н | М | <u>L</u> | Н | М | <u>L</u> | <u>H</u> | М | L | |
| Value | <u>H</u> | М | L | <u>H</u> | М | L | <u>H</u> | М | L | TOTAL |
| Score Based on Ratings | | 6 | | | 6 | | | 7 | | 19 |

Score for each function based on three ratings (order of ratings is not important) 9 = H,H,H8 = 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 | | \boxtimes | |

Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

| Map of: | To answer questions: | Figure # |
|---|----------------------|----------|
| Cowardin plant classes | D 1.3, H 1.1, H 1.4 | 1 |
| Hydroperiods | D 1.4, H 1.2 | 2 |
| Location of outlet (can be added to map of hydroperiods) | D 1.1, D 4.1 | 2 |
| Boundary of area within 150 ft of the wetland (can be added to another figure) | D 2.2, D 5.2 | 2 |
| Map of the contributing basin | D 4.3, D 5.3 | 3 |
| 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 | 4 |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website) | D 3.1, D 3.2 | 5 |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web) | D 3.3 | 6 |

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 en | tire unit usually controlled by tides except during floods? |
|---|---|---|
| | ⊠N0 – go to 2 | \square YES – the wetland class is Tidal Fringe – go to 1.1 |
| 1 | 1.1 Is the salinity of the water d | uring periods of annual low flow below 0.5 ppt (parts per thousand)? |
| | | fied as a Freshwater Tidal Fringe use the forms for Riverine wetlands. If it s an Estuarine wetland and is not scored. This method cannot be used to |
| 2. | | and precipitation is the only source (>90%) of water to it. Groundwater NOT sources of water to the unit. |
| | \boxtimes NO – go to 3 If your wetland can be classified | \square YES – The wetland class is Flats ed as a Flats wetland, use the form for Depressional wetlands. |
| 3. | ☐ The vegetated part of the w plants on the surface at any | meet all of the following criteria? retland is on the shores of a body of permanent open water (without any y time of the year) at least 20 ac (8 ha) in size; ater area is deeper than 6.6 ft (2 m). |
| | ⊠N0 – go to 4 | \square YES – The wetland class is Lake Fringe (Lacustrine Fringe) |
| ⊠The wetland is on a slop ⊠The water flows throug seeps. It may flow subs | | meet all of the following criteria? Slope can be very gradual), e wetland in one direction (unidirectional) and usually comes from face, as sheetflow, or in a swale without distinct banks, and without being impounded. |
| | \boxtimes NO – go to 5 | \Box YES – The wetland class is Slope |
| | | ot pond in these type of wetlands except occasionally in very small and d hummocks (depressions are usually <3 ft diameter and less than 1 ft |
| 5. | ☐ The unit is in a valley, or stream or river, | meet all of the following criteria? ream channel, where it gets inundated by overbank flooding from that ars at least once every 2 years. |

| | NO – go to 6NOTE: The Riverine unit can contain depressions flooding | ☐ YES – The wetland class is Riverine s that are filled with water when the river is not |
|----|--|--|
| 6. | Is the entire wetland unit in a topographic depressurface, at some time during the year? <i>This mean of the wetland.</i> | ssion in which water ponds, or is saturated to the ns that any outlet, if present, is higher than the interior |
| | □ NO – go to 7 | \boxtimes YES – The wetland class is Depressional |
| 7. | Is the entire wetland unit located in a very flat are flooding? The unit does not pond surface water maintained by high groundwater in the area. The outlet. | <u>-</u> |
| | □ NO – go to 8 | \square 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 | HGM class to |
|---------------------------------------|---------------|
| being rated | use in rating |
| Slope + Riverine | Riverine |
| Slope + Depressional | Depressional |
| Slope + Lake Fringe | Lake Fringe |
| Depressional + Riverine along stream | Depressional |
| within boundary of depression | |
| Depressional + Lake Fringe | Depressional |
| Riverine + Lake Fringe | Riverine |
| Salt Water Tidal Fringe and any other | Treat as |
| class of freshwater wetland | 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.

| DEPRESSIONAL AND FLATS WETLANDS | | | | | |
|--|------------------|-----------|--|--|--|
| Water Quality Functions - Indicators that the site functions to improve water | er 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 (| | | | | |
| \square Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowin | points = 3 | 2 | | | |
| Wettand has an intermittently nowing stream of ditch, OK nightly constricted permanently nowing | points = 2 | 3 | | | |
| $\ \square$ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. | points = 1 | | | | |
| $\ \square$ 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 | s = 4 ⊠ No = 0 | 0 | | | |
| D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Coward | in classes): | | | | |
| ☑ Wetland has persistent, ungrazed, plants > 95% of area | points = 5 | | | | |
| \square Wetland has persistent, ungrazed, plants > 1/2 of area | points = 3 | 5 | | | |
| \square Wetland has persistent, ungrazed plants > 1/10 of area | points = 1 | | | | |
| \square 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. | | | | | |
| \square Area seasonally ponded is > $\frac{1}{2}$ total area of wetland | points = 4 | 0 | | | |
| ☐ Area seasonally ponded is > ¼ total area of wetland | points = 2 | | | | |
| ☑ Area seasonally ponded is < ¼ total area of wetland ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ | points = 0 | | | | |
| Total for D 1 Add the points in the box | xes above | 8 | | | |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 0-5 = L Record the | rating on the f | irst 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? \Box Yes = | 1 ⊠ No = 0 | 0 | | | |
| D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? \Box Yes = | 1 ⊠ No = 0 | 0 | | | |
| D 2.3. Are there septic systems within 250 ft of the wetland? \Box Yes = | 1 ⊠ No = 0 | 0 | | | |
| D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in | | 0 | | | |
| · | 1 ⊠ No = 0 | | | | |
| Total for D 2 Add the points in the box | xes above | 0 | | | |
| Rating of Landscape Potential If score is: $\square 3$ or $4 = H$ $\square 1$ or $2 = M$ $\boxtimes 0 = L$ Record the r | ating on the fir | st 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 | | 0 | | | |
| water that is on the 303(d) list? \square 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? \Box 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)? $	extstyle 	extstyle $ | 2 □ No = 0 | 2 | | | |
| Total for D 3 Add the points in the box | xes above | 2 | | | |
| Rating of Value If score is: $\square 2-4 = H \square 1 = M \square 0 = L$ Record the | rating on the f | irst page | | | |

| DEPRESSIONAL AND FLATS WETLANDS | |
|--|------------|
| Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradati | on |
| 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). ☐ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. ☐ Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. ☐ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. D 4.1. Characteristics of surface water leaving it (no outlet). points = 4 points = 2 D 4.1. Characteristics of surface water outlet). points = 2 D 4.1. Characteristics of surface water outlet). | 4 |
| D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part. □ Marks of ponding are 3 ft or more above the surface or bottom of outlet. □ Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet. □ Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet. □ The wetland is a "headwater" wetland. □ Wetland is flat but has small depressions on the surface that trap water. □ Marks of ponding less than 0.5 ft (6 in). | 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. □ The area of the basin is 10 to 100 times the area of the unit. □ The area of the basin is more than 100 times the area of the unit. □ Entire wetland is in the Flats class. | 3 |
| Total for D 4 Add the points in the boxes above | 7 |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 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? \square Yes = 1 \square No = 0 | 0 |
| D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? \square Yes = 1 \square No = 0 | 0 |
| D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? \Box Yes = 1 \boxtimes No = 0 | 0 |
| Total for D 5 Add the points in the boxes above | 0 |
| Rating of Landscape Potential If score is: $\Box 3 = H$ $\Box 1$ or $2 = M$ $\boxtimes 0 = L$ 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 ■ □ 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 | 2 |
| ☐ 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: $\boxtimes 2-4 = H$ $\square 1 = M$ $\square 0 = L$

Record the rating on the first page

| These questions apply to wetlands of all HGM classes. | |
|--|---|
| HABITAT FUNCTIONS - Indicators that site functions to provide important habitat | |
| H 1.0. Does the site have the potential to provide habitat? | |
| H 1.1. Structure of plant community: Indicators are Cowardin classes and strata within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked. □ Aquatic bed □ Emergent □ Scrub-shrub (areas where shrubs have > 30% cover) □ Scrub-shrub (areas where shrubs have > 30% cover) □ Forested (areas where trees have > 30% cover) □ 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 □ Seasonally flooded or inundated □ Occasionally flooded or inundated □ Occasionally flooded or inundated □ Saturated only □ Permanently flowing stream or river in, or adjacent to, the wetland □ Seasonally flowing stream in, or adjacent to, the wetland □ Lake Fringe wetland □ Lake Fringe wetland □ Freshwater tidal wetland □ Seasonally flowing stream in, or adjacent to, the wetland □ Lake Fringe wetland □ Seasonally flowing stream in, or adjacent to, the wetland □ Lake Fringe wetland □ Lake Fringe wetland □ Seasonally flowing stream in, or adjacent to, the wetland □ Lake Fringe wetland □ Seasonally flowing stream in, or adjacent to, the wetland | 0 |
| H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle If you counted: > 19 species points = 2 5 - 19 species points = 1 < 5 species points = 0 | 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 All three diagrams in this row are □ HIGH = 3points | 0 |

| 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 3.3 ft (1 m). | |
| ☐ Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree | 3 |
| 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). | |
| | |
| strata). | |
| Total for H 1 Add the points in the boxes above | 4 |
| Rating of Site Potential If score is: \Box 15-18 = H \Box 7-14 = M \boxtimes 0-6 = L Record the rating on the | e 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 <i>only habitat that directly abuts wetland unit</i>). | |
| Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2] = 76% + (4.5%/2) = 78.25% | |
| If total accessible habitat is: | |
| \boxtimes > 1/3 (33.3%) of 1 km Polygon points = 3 | 3 |
| \square 20-33% of 1 km Polygon points = 2 | |
| \square 10-19% of 1 km Polygon points = 1 | |
| \square < 10% of 1 km Polygon points = 0 | |
| H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. | |
| Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2 = 92% + (5.5%/2) = 94.75% | |
| ☐ Undisturbed habitat > 50% of Polygon points = 3 | , |
| ☐ Undisturbed habitat 10-50% and in 1-3 patches points = 2 | 3 |
| ☐ Undisturbed habitat 10-50% and > 3 patches points = 1 | |
| ☐ Undisturbed habitat < 10% of 1 km Polygon points = 0 | |
| H 2.3. Land use intensity in 1 km Polygon: If | |
| \square > 50% of 1 km Polygon is high intensity land use points = (-2) | 0 |
| | |
| Total for H 2 Add the points in the boxes above | 6 |
| Rating of Landscape Potential If score is: \boxtimes 4-6 = H \square 1-3 = M \square < 1 = L Record the rating on the f | |
| nating of Earlascape Fotential in Score is. 24 0 - 11 213 - 10 2 1 - 2 | Jii st 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 | 2 |
| ☐ 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 ☐ Site does not most any of the griteria shave | |
| ☐ Site does not meet any of the criteria above points = 0 | |

Rating of Value If score is: $\boxtimes 2 = H \square 1 = M \square 0 = L$

Record the rating on the first page

WDFW Priority Habitats

<u>Priority habitats listed by WDFW</u> (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.

| \square 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 (<i>full descriptions in WDFW PHS report</i>). |
| \square 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 (<i>full descriptions in WDFW PHS report p. 158 – see web link above</i>). |
| ☐ 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 (<i>full descriptions in WDFW PHS report p. 161 – see web link above</i>). |
| ☐ 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). |
| \square 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. |
| \Box Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation. |
| \Box 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. |
| \boxtimes 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.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

| Wetland Type | Category |
|--|----------|
| Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met. | |
| SC 1.0. Estuarine wetlands | |
| Does the wetland meet the following criteria for Estuarine wetlands? | |
| ☐ The dominant water regime is tidal, | |
| \square Vegetated, and | |
| ☐ With a salinity greater than 0.5 ppt ☐ Yes –Go to SC 1.1 ☒ No= Not an estuarine wetland | |
| 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? | Cat. I |
| Yes = Category I □ No - Go to SC 1.2 | |
| 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 | Cat. I |
| less than 10% cover of non-native plant species. (If non-native species are <i>Spartina</i> , see page 25) | |
| | |
| \square At least ${}^{3}\!\!\!\!/$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un- mowed grassland. | Cat. II |
| | |
| □ 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 | |
| of contiguous freshwater wetlands. | |
| 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? \times Yes - Go to SC 2.2 \times No - Go to SC 2.3 | |
| SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? | |
| http://www.dnr.wa.gov/NHPwetlandviewer □Yes = Category I ☑No = Not a WHCV | |
| SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? | Cat. I |
| http://file.dnr.wa.gov/publications/amp_nh_wetlands_trs.pdf | |
| \Box Yes – Contact WNHP/WDNR and go to SC 2.4 \Box 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? | |
| SC 3.0. Bogs | |
| Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key</i> | |
| 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? \Box Yes – Go to SC 3.3 \boxtimes 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? \square Yes – Go to SC 3.3 \square 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% | Cat. I |
| 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 | |

| 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? <i>If you answer YES you will still need to rate the wetland based on its functions.</i> □ 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). | Cat. I |
| ☐Yes = Category I ☐No = Not a forested wetland for this section | |
| SC 5.0. Wetlands in Coastal Lagoons | |
| Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? | |
| \Box 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 | Cat. I |
| bottom) | . |
| ☐ 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? | |
| \square The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has | Cat. II |
| less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). | |
| \square At least $rac{3}{4}$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | |
| un- mowed grassland. \Box 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: | Cat I |
| ☐ Long Beach Peninsula: Lands west of SR 103 | |
| ☐ Grayland-Westport: Lands west of SR 105 | |
| \square Ocean Shores-Copalis: Lands west of SR 115 and SR 109 | Cat. II |
| \square Yes – Go to SC 6.1 \square No = not an interdunal wetland for rating | Cat. II |
| 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)? \Box Yes = Category I \Box No – Go to SC 6.2 | Cat. III |
| 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 | |
| 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 |
| Tes - Category III LINO - Category IV | |
| | |
| Category of wetland based on Special Characteristics | NI A |
| If you answered No for all types, enter "Not Applicable" on Summary Form | NA |

Wetland name or number: Click here to enter text.

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WETLAND RATING FORMS

AREA 5 - MBR DRAINFIELD

Wetland CCC

RATING SUMMARY – Western Washington

Name of wetland (or ID #): CCC Date of site visit: 8/5/2021

Rated by: Jamie Sloan and Roen Hohlfeld Trained by Ecology? ⊠Y □N Date of training: 9/2017

HGM Class used for rating: Depressional Wetland has multiple HGM classes? \square Y \boxtimes N

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

OVERALL WETLAND CATEGORY (based on functions ⊠ or special characteristics □)

1. Category of wetland based on FUNCTIONS

- ☐ Category I Total score = 23 27
- \boxtimes Category II – Total score = 20 - 22
- ☐ Category III Total score = 16 19
- ☐ Category IV Total score = 9 15

| FUNCTION | Improving Water Quality | | Hy | ydrolo | ogic | Habitat | | | | |
|------------------------|-------------------------|---|----|----------|--------|----------|----------|---------|-------|-------|
| | | | | | Circle | the ap | propr | iate ra | tings | |
| Site Potential | Н | M | L | Н | М | <u>L</u> | Н | M | L | |
| Landscape Potential | Н | M | L | Н | М | <u>L</u> | <u>H</u> | М | L | |
| Value | <u>H</u> | М | L | <u>H</u> | М | L | Н | M | L | TOTAL |
| Score Based on Ratings | | 7 | | | 5 | | | 8 | | 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,L5 = 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 | | \boxtimes |

Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

| Map of: | To answer questions: | Figure # |
|---|----------------------|----------|
| Cowardin plant classes | D 1.3, H 1.1, H 1.4 | 1 |
| Hydroperiods | D 1.4, H 1.2 | 2 |
| Location of outlet (can be added to map of hydroperiods) | D 1.1, D 4.1 | 2 |
| Boundary of area within 150 ft of the wetland (can be added to another figure) | D 2.2, D 5.2 | 2 |
| Map of the contributing basin | D 4.3, D 5.3 | 3 |
| 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 | 4 |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website) | D 3.1, D 3.2 | 5 |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web) | D 3.3 | 6 |

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? | | |
|---|---|---|--|
| | \boxtimes NO – go to 2 | \square 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)? | | |
| | | ne) YES – Freshwater Tidal Fringe eshwater Tidal Fringe use the forms for Riverine wetlands. If it ine wetland and is not scored. This method cannot be used to | |
| 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. | | |
| | \boxtimes NO – go to 3 If your wetland can be classified as a Flats | \Box YES – The wetland class is 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). | | |
| | \boxtimes NO – go to 4 \square YES – 7 | Γhe 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 (<i>slope can be very gradual</i>), ⊠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 . | | |
| | \boxtimes NO – go to 5 | \square YES – The wetland class is Slope | |
| | | hese type of wetlands except occasionally in very small and ks (depressions are usually <3 ft diameter and less than 1 ft | |
| 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 stream or river, □ The overbank flooding occurs at least once every 2 years. | | el, where it gets inundated by overbank flooding from that | |

| Wetland name | or | number: | CCC |
|--------------|----|---------|-----|
|--------------|----|---------|-----|

| | NO – go to 6NOTE: The Riverine unit can contain depressions flooding | ☐ YES – The wetland class is Riverine that are filled with water when the river is not |
|----|--|---|
| 6. | Is the entire wetland unit in a topographic depressurface, at some time during the year? <i>This mean of the wetland.</i> | sion in which water ponds, or is saturated to the as that any outlet, if present, is higher than the interior |
| | □ NO – go to 7 | $oxtimes \mathbf{YES}$ – The wetland class is Depressional |
| 7. | Is the entire wetland unit located in a very flat are flooding? The unit does not pond surface water n maintained by high groundwater in the area. The outlet. | • |
| | □ NO – go to 8 | \square 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 | HGM class to |
|---------------------------------------|---------------|
| being rated | use in rating |
| Slope + Riverine | Riverine |
| Slope + Depressional | Depressional |
| Slope + Lake Fringe | Lake Fringe |
| Depressional + Riverine along stream | Depressional |
| within boundary of depression | |
| Depressional + Lake Fringe | Depressional |
| Riverine + Lake Fringe | Riverine |
| Salt Water Tidal Fringe and any other | Treat as |
| class of freshwater wetland | 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.

| <u>DEPRESSIONAL AND FLATS WETLANDS</u> Water Quality Functions - Indicators that the site functions to improve wat | er 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 ☐ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing ☐ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing ☐ Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. | points = 3 ng outlet. points = 2 points = 1 points = 1 | 1 |
| D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions). □Ye D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowar □ Wetland has persistent, ungrazed, plants > 95% of area □ Wetland has persistent, ungrazed plants > 1/2 of area □ Wetland has persistent, ungrazed plants > 1/10 of area □ Wetland has persistent, ungrazed plants < 1/10 of area | | 5 |
| 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 ☐ Area seasonally ponded is > ¼ total area of wetland ☐ Area seasonally ponded is < ¼ total area of wetland | points = 4 points = 2 points = 0 | 0 |
| Total for D 1 Add the points in the bo | oxes above | 0 |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 0-5 = L <i>Record th</i> | e rating on the f | irst 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? | = 1 × No = 0 | 0 |
| D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? \Box Yes = | = 1 ⊠ No = 0 | 0 |
| | = 1 □ No = 0 | 1 |
| D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1-D 2.3? Source: | : 1 ⊠ No = 0 | 0 |
| Total for D 2 Add the points in the bo | oxes above | 1 |
| Rating of Landscape Potential If score is: $\Box 3$ or $4 = H$ $\boxtimes 1$ or $2 = M$ $\Box 0 = L$ Record the | rating on the fir | st 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? | = 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? \Box 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)? | = 2 | 2 |
| Total for D 3 Add the points in the bo | oxes above | 2 |
| Rating of Value If score is: $\square 2-4 = H \square 1 = M \square 0 = L$ Record th | e rating on the f | irst page |

| DEPRESSIONAL AND FLATS WETLANDS | |
|---|------------|
| Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation | on |
| 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). ☐ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. ☐ Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. ☐ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. ☐ points = 0 | 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. □ Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet. □ Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet. □ The wetland is a "headwater" wetland. □ Wetland is flat but has small depressions on the surface that trap water. □ Marks of ponding less than 0.5 ft (6 in). | 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. □ The area of the basin is 10 to 100 times the area of the unit. □ The area of the basin is more than 100 times the area of the unit. □ Entire wetland is in the Flats class. | 3 |
| Total for D 4 Add the points in the boxes above | 3 |
| Rating of Site Potential If score is: \Box 12-16 = H \Box 6-11 = M \boxtimes 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? \square Yes = 1 \boxtimes No = 0 | 0 |
| D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? \square Yes = 1 \square No = 0 | 0 |
| D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? \Box Yes = 1 \boxtimes No = 0 | 0 |
| Total for D 5 Add the points in the boxes above | 0 |
| Rating of Landscape Potential If score is: $\Box 3 = H \Box 1$ or $2 = M \boxtimes 0 = L$ 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 ■ 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. | 2 |
| Explain why: points = 0 ☐ There are no problems with flooding downstream of the wetland. points = 0 | |
| 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? | 0 |
| Explain why: points = 0 ☐ There are no problems with flooding downstream of the wetland. points = 0 | 0 2 |

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

Record the rating on the first page

These questions apply to wetlands of all HGM classes. **HABITAT FUNCTIONS** - Indicators that site functions to provide important habitat H 1.0. Does the site have the potential to provide habitat? H 1.1. Structure of plant community: Indicators are Cowardin classes and strata within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked. ☐ Aquatic bed 4 structures or more: points = 4 ☐ Emergent 3 structures: points = 2 1 ☐ 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 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 2 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 H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle 2 If you counted: ⋈ > 19 species points = 2 ☐ 5 - 19 species points = 1 \Box < 5 species points = 0H 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. 0 **None** = 0 points ☐ **Moderate** = 2 points \square Low = 1 point All three diagrams in this row are ☐ **HIGH** = 3points

| 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 0) | 5 ft long). | |
| | | |
| ☐ Undercut banks are present for at least 6.6 ft (2 m) AND/OR overhange | ng plants extends at least 3.3 ft (1 m) | |
| over a stream (or ditch) in, or contiguous with the wetland, for at least | | |
| ☐ Stable steep banks of fine material that might be used by beaver or r | • | 3 |
| slope) OR signs of recent beaver activity are present (cut shrubs or to | - ' - | |
| where wood is exposed). | and that have her yet heathered | |
| ☐ 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 amp | - | |
| | | |
| strata). | 6. p.a (566 // 2.2 fer met ej | |
| Total for H 1 | Add the points in the boxes above | 8 |
| | | |
| Rating of Site Potential If score is: \Box 15-18 = H \boxtimes 7-14 = M \Box 0-6 = L | Record the rating on t | ne jirst page |
| H 2.0. Does the landscape have the potential to support the habitat funct | ions of the site? | |
| H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit). | | |
| Calculate: % undisturbed habitat + [(%moderate and low intensity land use | es)/2] = 34% + (14%/2) = 41% | |
| If total accessible habitat is: | | |
| | points = 3 | 3 |
| ☐ 20-33% of 1 km Polygon | points = 2 | _ |
| ☐ 10-19% of 1 km Polygon | points = 1 | |
| · - | • | |
| ☐ < 10% of 1 km Polygon | points = 0 | |
| H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. | \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | |
| Calculate: % undisturbed habitat + [(%moderate and low intensity land use | | |
| ☐ Undisturbed habitat > 50% of Polygon | points = 3 | 3 |
| ☐ Undisturbed habitat 10-50% and in 1-3 patches | points = 2 | J |
| ☐ Undisturbed habitat 10-50% and > 3 patches | points = 1 | |
| ☐ Undisturbed habitat < 10% of 1 km Polygon | points = 0 | |
| H 2.3. Land use intensity in 1 km Polygon: If | | |
| ☐ > 50% of 1 km Polygon is high intensity land use | points = (- 2) | 0 |
| | points = 0 | |
| Total for H 2 | Add the points in the boxes above | 6 |
| Rating of Landscape Potential If score is: $\boxtimes 4-6 = H \square 1-3 = M \square < 1 = L$ | Record the rating on th | _ |
| | | e jii et 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 poli | cies? Choose only the highest score | |
| that applies to the wetland being rated. | | |
| Site meets ANY of the following criteria: | points = 2 | |
| \square It has 3 or more priority habitats within 100 m (see next page) | | |
| \square It provides habitat for Threatened or Endangered species (any plar | nt or animal on the state or federal lists) | |
| ☐ It is mapped as a location for an individual WDFW priority species | | 1 |
| \square It is a Wetland of High Conservation Value as determined by the De | epartment of Natural Resources | |
| $\ \square$ It has been categorized as an important habitat site in a local or re | gional comprehensive plan, | |
| in a Shoreline Master Plan, or in a watershed plan | | |
| oxtimes Site has 1 or 2 priority habitats (listed on next page) within 100 m | points = 1 | |
| \square Site does not meet any of the criteria above | points = 0 | |
| | | |

Rating of Value If score is: $\Box 2 = H \boxtimes 1 = M \Box 0 = L$

Record the rating on the first page

WDFW Priority Habitats

<u>Priority habitats listed by WDFW</u> (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 (<i>full descriptions in WDFW PHS report</i>). |
| \square Herbaceous Balds: Variable size patches of grass and forbs on shallow soils over bedrock. |
| \Box Old-growth/Mature forests: <u>Old-growth west of Cascade crest</u> – 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. <u>Mature forests</u> – 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 (<i>full descriptions in WDFW PHS report p. 158 – see web link above</i>). |
| \square Riparian : The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other. |
| \square Westside Prairies: Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (<i>full descriptions in WDFW PHS report p. 161 – see web link above</i>). |
| ☐ 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. (<i>full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page</i>). |
| \Box 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. |
| \Box Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation. |
| \Box Talus: Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, 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.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

| Wetland Type | Category |
|--|----------|
| Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met. | |
| SC 1.0. Estuarine wetlands | |
| Does the wetland meet the following criteria for Estuarine wetlands? | |
| ☐ The dominant water regime is tidal, | |
| \square Vegetated, and | |
| ☐ With a salinity greater than 0.5 ppt ☐ Yes –Go to SC 1.1 ☐ No= Not an estuarine wetland | |
| 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? | Cat. I |
| \square Yes = Category I \square No - Go to SC 1.2 | |
| SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? | |
| \square The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has | Cat. I |
| less than 10% cover of non-native plant species. (If non-native species are Spartina, see page 25) | |
| \square At least $rac{\pi}{4}$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | . |
| un- mowed grassland. | Cat. II |
| \Box The wetland has at least two of the following features: tidal channels, depressions with open water, | |
| or contiguous freshwater wetlands. \square Yes = Category I \square No= Category 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? | |
| http://www.dnr.wa.gov/NHPwetlandviewer □Yes = Category I ☑No = Not a WHCV | |
| SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? | Cat. I |
| http://file.dnr.wa.gov/publications/amp nh wetlands trs.pdf | |
| \Box Yes – Contact WNHP/WDNR and go to SC 2.4 \Box 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? \Box Yes = Category I \Box No = Not a WHCV | |
| 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? \Box Yes – Go to SC 3.3 \boxtimes 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? | Cat. I |
| 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 | Cat. 1 |
| 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 | 1 |

| 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? <i>If you answer YES you will still need to rate the wetland based on its functions.</i> □ 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). | Cat. I |
| □Yes = Category I ⊠No = Not a forested wetland for this section | |
| 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) ☐ 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). ☐ At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. ☐ The wetland is larger than ¹/₁₀ ac (4350 ft²) ☐ Yes = Category I ☐ No = Category II | Cat. 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 Ocean Shores-Copalis: Lands west of SR 115 and SR 109 Yes – Go to SC 6.1 No = not an interdunal wetland for rating | Cat I Cat. II |
| 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)? 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 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. III Cat. IV |
| Category of wetland based on Special Characteristics If you answered No for all types, enter "Not Applicable" on Summary Form | NA |

Wetland name or number: Click here to enter text.

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WETLAND RATING FORMS

AREA 6 - CAMPGROUND

Wetland A

Wetland C

Wetland RR

Wetland SS

Wetland TT

Wetland UU

Wetland VV

Wetland WW

Wetland XX

RATING SUMMARY – Western Washington

Name of wetland (or ID #): A Date of site visit: 1/13/2021

Rated by: <u>Jamie Sloan and Roen Hohlfeld</u> Trained by Ecology? \boxtimes Y \square N Date of training: <u>9/2017</u>

HGM Class used for rating: <u>Depressional</u> 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: Google Earth, Pierce County

OVERALL WETLAND CATEGORY (based on functions ⊠ or special characteristics □)

1. Category of wetland based on FUNCTIONS

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

| FUNCTION | | mprov ter Q | ing uality | Hydrologic | | Habitat | | | | |
|------------------------|----------|----------------|---------------|------------|----------|----------|-------|----------|-------|-------|
| | | | | | Circle t | the ap | propr | iate ra | tings | |
| Site Potential | Н | M | L | Н | M | L | Н | M | L | |
| Landscape Potential | Н | М | <u>L</u> | Н | М | <u>L</u> | Н | <u>M</u> | L | |
| Value | <u>H</u> | М | L | <u>H</u> | М | L | Н | M | L | TOTAL |
| Score Based on Ratings | | 6 | | | 6 | | | 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,L4 = 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 | \boxtimes | |

Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

| Map of: | To answer questions: | Figure # |
|---|----------------------|----------|
| Cowardin plant classes | D 1.3, H 1.1, H 1.4 | 1 |
| Hydroperiods | D 1.4, H 1.2 | 2 |
| Location of outlet (can be added to map of hydroperiods) | D 1.1, D 4.1 | 2 |
| Boundary of area within 150 ft of the wetland (can be added to another figure) | D 2.2, D 5.2 | 2 |
| Map of the contributing basin | D 4.3, D 5.3 | 3 |
| 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 | 4 |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website) | D 3.1, D 3.2 | 5 |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web) | D 3.3 | 6 |

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 en | tire unit usually controlled by tides except during floods? |
|----|---|---|
| | ⊠N0 – go to 2 | \square YES – the wetland class is Tidal Fringe – go to 1.1 |
| 1 | 1.1 Is the salinity of the water d | uring periods of annual low flow below 0.5 ppt (parts per thousand)? |
| | | fied as a Freshwater Tidal Fringe use the forms for Riverine wetlands. If it s an Estuarine wetland and is not scored. This method cannot be used to |
| 2. | | and precipitation is the only source (>90%) of water to it. Groundwater NOT sources of water to the unit. |
| | \boxtimes NO – go to 3 If your wetland can be classified | \square YES – The wetland class is Flats ed as a Flats wetland, use the form for Depressional wetlands. |
| 3. | ☐ The vegetated part of the w plants on the surface at any | meet all of the following criteria? retland is on the shores of a body of permanent open water (without any y time of the year) at least 20 ac (8 ha) in size; ater area is deeper than 6.6 ft (2 m). |
| | ⊠N0 – go to 4 | \square YES – The wetland class is Lake Fringe (Lacustrine Fringe) |
| 4. | ☑ The wetland is on a slope (.☑ The water flows through the seeps. It may flow subsurf | meet all of the following criteria? Slope can be very gradual), e wetland in one direction (unidirectional) and usually comes from face, as sheetflow, or in a swale without distinct banks, and without being impounded. |
| | \boxtimes NO – go to 5 | \Box YES – The wetland class is Slope |
| | | ot pond in these type of wetlands except occasionally in very small and d hummocks (depressions are usually <3 ft diameter and less than 1 ft |
| 5. | ☐ The unit is in a valley, or stream or river, | meet all of the following criteria? ream channel, where it gets inundated by overbank flooding from that ars at least once every 2 years. |

| Wetland name o | r number: | Α |
|----------------|-----------|---|
|----------------|-----------|---|

| | NO – go to 6NOTE: The Riverine unit can contain depressions flooding | ☐ YES – The wetland class is Riverine that are filled with water when the river is not |
|----|--|---|
| 6. | Is the entire wetland unit in a topographic depressurface, at some time during the year? <i>This mean of the wetland.</i> | sion in which water ponds, or is saturated to the as that any outlet, if present, is higher than the interior |
| | □ NO – go to 7 | $oxtimes \mathbf{YES}$ – The wetland class is Depressional |
| 7. | Is the entire wetland unit located in a very flat are flooding? The unit does not pond surface water maintained by high groundwater in the area. The outlet. | |
| | □ NO – go to 8 | \square 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 | HGM class to |
|---------------------------------------|---------------|
| being rated | use in rating |
| Slope + Riverine | Riverine |
| Slope + Depressional | Depressional |
| Slope + Lake Fringe | Lake Fringe |
| Depressional + Riverine along stream | Depressional |
| within boundary of depression | |
| Depressional + Lake Fringe | Depressional |
| Riverine + Lake Fringe | Riverine |
| Salt Water Tidal Fringe and any other | Treat as |
| class of freshwater wetland | 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.

| <u>DEPRESSIONAL AND FLATS WETLANDS</u> 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 (r.) ☐ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing. ☐ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. ☐ Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions). ☐ Yes | points = 3 goutlet. points = 2 points = 1 points = 1 | 1 | | |
| D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardi | n classes): points = 5 points = 3 points = 1 points = 0 | 5 | | |
| 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 □ Area seasonally ponded is > ¼ total area of wetland □ Area seasonally ponded is < ¼ total area of wetland | points = 4 points = 2 points = 0 | 2 | | |
| Total for D 1 Add the points in the box | es above | 8 | | |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 0-5 = L Record the | rating on the fi | irst 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? \Box Yes = 1 | L ⊠ No = 0 | 0 | | |
| D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? \Box Yes = 1 | L ⊠ No = 0 | 0 | | |
| D 2.3. Are there septic systems within 250 ft of the wetland? \Box Yes = 1 | L ⊠ 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: | . ⊠ No = 0 | 0 | | |
| Total for D 2 Add the points in the box | es above | 0 | | |
| Rating of Landscape Potential If score is: $\Box 3$ or $4 = H$ $\Box 1$ or $2 = M$ $\boxtimes 0 = L$ Record the re- | ating on the firs | st 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? | L ⊠ 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? \Box Yes = 1 | L ⊠ 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)? | 2 | 2 | | |
| Total for D 3 Add the points in the box | es above | 2 | | |
| Rating of Value If score is: $\boxtimes 2-4 = H \square 1 = M \square 0 = L$ Record the | rating on the fi | irst page | | |

| <u>DEPRESSIONAL AND FLATS WETLANDS</u> | |
|---|------------|
| Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradati | on |
| D 4.0. Does the site have the potential to reduce flooding and erosion? | |
| D 4.1. Characteristics of surface water outflows from the wetland: ☐ Wetland is a depression or flat depression with no surface water leaving it (no outlet). points = 4 ☐ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. points = 2 ☐ Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1 ☐ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. points = 0 | 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. □ Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet. □ Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet. □ The wetland is a "headwater" wetland. □ Wetland is flat but has small depressions on the surface that trap water. □ Marks of ponding less than 0.5 ft (6 in). | 3 |
| 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. □ The area of the basin is 10 to 100 times the area of the unit. □ The area of the basin is more than 100 times the area of the unit. □ Entire wetland is in the Flats class. | 5 |
| Total for D 4 Add the points in the boxes above | 8 |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 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? \square Yes = 1 \square No = 0 | 0 |
| D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? \square Yes = 1 \square No = 0 | 0 |
| D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? ☐ Yes = 1 ☐ No = 0 | 0 |
| Total for D 5 Add the points in the boxes above | 0 |
| Rating of Landscape Potential If score is: $\Box 3 = H \Box 1$ or $2 = M \boxtimes 0 = L$ 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 ■ 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 | 2 |
| D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? | 0 |
| | 2 |
| | |

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 3 structures: points = 2 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 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 1 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 H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle 2 If you counted: ⋈ > 19 species points = 2 ☐ 5 - 19 species points = 1 \Box < 5 species points = 0H 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. 1 \square None = 0 points ☐ **Moderate** = 2 points \boxtimes Low = 1 point All three diagrams in this row are ☐ **HIGH** = 3points

| 145 C 11 12 15 1 | 1 | 1 |
|--|--|----------------|
| H 1.5. Special habitat features: | | |
| Check the habitat features that are present in the wetland. <i>The number of</i> | - · · | |
| ☐ Large, downed, woody debris within the wetland (> 4 in diameter and (| oft long). | |
| Standing snags (dbh > 4 in) within the wetland. | | |
| Undercut banks are present for at least 6.6 ft (2 m) AND/OR overhanged over a stream (or ditch) in, or contiguous with the wetland, for at least | | |
| \Box Stable steep banks of fine material that might be used by beaver or r | | 4 |
| slope) OR signs of recent beaver activity are present (cut shrubs or to | | |
| 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 amp | - | |
| ☑ Invasive plants cover less than 25% of the wetland area in every stratu | m of plants (see H 1.1 for list of | |
| strata). | | |
| Total for H 1 | Add the points in the boxes above | 10 |
| Rating of Site Potential If score is: \Box 15-18 = H \boxtimes 7-14 = M \Box 0-6 = L | Record the rating on t | the first page |
| H 2.0. Does the landscape have the potential to support the habitat funct | ions of the site? | |
| H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit). | | |
| Calculate: % undisturbed habitat + [(%moderate and low intensity land use | es\/21 = 7% + (0.5%/2) = 7.25 % | |
| If total accessible habitat is: | 23// 2] = 7/0 : (0.3/0/ 2) = 7.23/0 | |
| | nainta 2 | 0 |
| ☐ > 1/3 (33.3%) of 1 km Polygon | points = 3 | 0 |
| ☐ 20-33% of 1 km Polygon | points = 2 | |
| ☐ 10-19% of 1 km Polygon | points = 1 | |
| | points = 0 | |
| H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. | | |
| Calculate: % undisturbed habitat + [(%moderate and low intensity land use | es)/2 = 91% + (7%/2) = 94.5% | |
| ☑ Undisturbed habitat > 50% of Polygon | points = 3 | 2 |
| ☐ Undisturbed habitat 10-50% and in 1-3 patches | points = 2 | 3 |
| ☐ Undisturbed habitat 10-50% and > 3 patches | points = 1 | |
| ☐ Undisturbed habitat < 10% of 1 km Polygon | points = 0 | |
| H 2.3. Land use intensity in 1 km Polygon: If | · | |
| □ > 50% of 1 km Polygon is high intensity land use | points = (- 2) | 0 |
| ⊠ ≤ 50% of 1 km Polygon is high intensity | points = 0 | Č |
| Total for H 2 | Add the points in the boxes above | 3 |
| Rating of Landscape Potential If score is: $\Box 4-6 = H \boxtimes 1-3 = M \Box < 1 = L$ | Record the rating on th | |
| nating of Editoscape Foreintal Processes 13. 12.4.0.11 12.13.10 12.4.1.1 | necora the rating on th | ie jiist 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 poli | cies? Choose only the highest score | |
| that applies to the wetland being rated. | | |
| Site meets ANY of the following criteria: | points = 2 | |
| $\ \square$ It has 3 or more priority habitats within 100 m (see next page) | | |
| $\ \square$ It provides habitat for Threatened or Endangered species (any plan | t or animal on the state or federal lists) | |
| $\hfill\Box$ It is mapped as a location for an individual WDFW priority species | | 1 |
| $\ \square$ It is a Wetland of High Conservation Value as determined by the D | - | |
| $\ \square$ It has been categorized as an important habitat site in a local or re | gional 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 | |

Rating of Value If score is: $\Box 2 = H \boxtimes 1 = M \Box 0 = L$

Record the rating on the first page

WDFW Priority Habitats

<u>Priority habitats listed by WDFW</u> (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 (<i>full descriptions in WDFW PHS report</i>). |
| \square Herbaceous Balds: Variable size patches of grass and forbs on shallow soils over bedrock. |
| \Box Old-growth/Mature forests: <u>Old-growth west of Cascade crest</u> – 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. <u>Mature forests</u> – 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 (<i>full descriptions in WDFW PHS report p. 158 – see web link above</i>). |
| \square Riparian : The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other. |
| \square Westside Prairies: Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (<i>full descriptions in WDFW PHS report p. 161 – see web link above</i>). |
| ☐ 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. (<i>full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page</i>). |
| \Box 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. |
| \Box Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation. |
| \Box Talus: Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, 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.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

| Wetland Type | Category |
|---|----------|
| Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met. | |
| SC 1.0. Estuarine wetlands | |
| Does the wetland meet the following criteria for Estuarine wetlands? | |
| \square 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 | |
| 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? | Cat. I |
| □Yes = Category I □No - Go to SC 1.2 | |
| SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? | Cat. I |
| ☐ The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has | Cat. I |
| less than 10% cover of non-native plant species. (If non-native species are <i>Spartina</i> , see page 25) | |
| \Box At least $\%$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. | Cat. II |
| ☐ The wetland has at least two of the following features: tidal channels, depressions with open water, | |
| or contiguous freshwater wetlands. | |
| area category: | |
| 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? | |
| SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? | |
| http://www.dnr.wa.gov/NHPwetlandviewer | Cat. I |
| http://file.dnr.wa.gov/publications/amp_nh_wetlands_trs.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? | |
| SC 3.0. Bogs | |
| Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key</i> | |
| 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? \Box Yes – Go to SC 3.3 \boxtimes 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? \Box Yes – Go to SC 3.3 \boxtimes No = Is not a bog | Cat I |
| 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% | Cat. I |
| cover of plant species listed in Table 4? \Box Yes = Is a Category I bog \Box 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 | |

| 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? <i>If you answer YES you will still need to rate the wetland based on its functions.</i> □ 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). | Cat. I |
| ☐Yes = Category I ☐No = Not a forested wetland for this section | |
| SC 5.0. Wetlands in Coastal Lagoons | |
| Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? | |
| \Box 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 | Cat. I |
| bottom) | . |
| ☐ 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? | |
| \square The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has | Cat. II |
| less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). | |
| \square At least $rac{3}{4}$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | |
| un- mowed grassland. \Box 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: | Cat I |
| ☐ Long Beach Peninsula: Lands west of SR 103 | |
| ☐ Grayland-Westport: Lands west of SR 105 | |
| \square Ocean Shores-Copalis: Lands west of SR 115 and SR 109 | Cat. II |
| \square Yes – Go to SC 6.1 \square No = not an interdunal wetland for rating | Cat. II |
| 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)? \Box Yes = Category I \Box No – Go to SC 6.2 | Cat. III |
| 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 | |
| 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 |
| Tes - Category III LINO - Category IV | |
| | |
| Category of wetland based on Special Characteristics | NI A |
| If you answered No for all types, enter "Not Applicable" on Summary Form | NA |

Wetland name or number: Click here to enter text.

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RATING SUMMARY – Western Washington

Name of wetland (or ID #): C Date of site visit: 2/19/2021

Rated by: Sam Payne and Roen Hohlfeld Trained by Ecology? ⊠Y □N Date of training: 9/2017

HGM Class used for rating: Depressional Wetland has multiple HGM classes? \square Y \boxtimes N

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

OVERALL WETLAND CATEGORY (based on functions ⊠ or special characteristics □)

1. Category of wetland based on FUNCTIONS

- ☐ Category I Total score = 23 27
- Category II – Total score = 20 - 22
- ☐ Category IV Total score = 9 15

| FUNCTION | | nprov ter Q | ing uality | Hy | ydrolo | gic | | Habita | at | |
|------------------------|----------|----------------|---------------|----------|--------|----------|-------|----------|----------|-------|
| | | | | | Circle | the ap | propr | iate ra | tings | |
| Site Potential | <u>H</u> | М | L | Н | М | L | Н | М | <u>L</u> | |
| Landscape Potential | Н | М | <u>L</u> | Н | М | <u>L</u> | Н | <u>M</u> | L | |
| Value | <u>H</u> | М | L | <u>H</u> | М | L | Н | M | L | TOTAL |
| Score Based on Ratings | | 7 | | | 5 | | | 5 | | 17 |

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,L5 = 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 | | \boxtimes | | |

Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

| Map of: | To answer questions: | Figure # |
|---|----------------------|----------|
| Cowardin plant classes | D 1.3, H 1.1, H 1.4 | 1 |
| Hydroperiods | D 1.4, H 1.2 | 2 |
| Location of outlet (can be added to map of hydroperiods) | D 1.1, D 4.1 | 2 |
| Boundary of area within 150 ft of the wetland (can be added to another figure) | D 2.2, D 5.2 | 2 |
| Map of the contributing basin | D 4.3, D 5.3 | 3 |
| 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 | 4 |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website) | D 3.1, D 3.2 | 5 |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web) | D 3.3 | 6 |

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. | 1. Are the water levels in the entire unit usually controlled by tides except | ot during floods? |
|----|---|--|
| | \boxtimes NO – go to 2 \square YES – the wetland class is | Tidal Fringe - go to 1.1 |
| 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) If your wetland can be classified as a Freshwater Tidal Fringe use the sis Saltwater Tidal Fringe it is an Estuarine wetland and is not scored. score functions for estuarine wetlands. | |
| 2. | 2. The entire wetland unit is flat and precipitation is the only source (>90 and surface water runoff are NOT sources of water to the unit. | 0%) of water to it. Groundwater |
| | oxtimes NO – go to 3 $oxtimes$ YES – The If your wetland can be classified as a Flats wetland, use the form for Dep | he wetland class is Flats pressional wetlands. |
| 3. | 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 perm plants on the surface at any time of the year) at least 20 ac (8 ha) in ☐ At least 30% of the open water area is deeper than 6.6 ft (2 m). | |
| | oxtimes NO – go to 4 $oxtimes$ YES – The wetland class is Lake Fri | nge (Lacustrine Fringe) |
| 4. | 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 (unidirection seeps. It may flow subsurface, as sheetflow, or in a swale without of ☑ The water leaves the wetland without being impounded. | - |
| | \boxtimes NO – go to 5 \square YES – Th | e wetland class is Slope |
| | NOTE : Surface water does not pond in these type of wetlands except shallow depressions or behind hummocks (depressions are usually < deep). | |
| 5. | 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 stream or river, □ The overbank flooding occurs at least once every 2 years. | overbank flooding from that |

| T A | 7 - 11 1 | | | 1 | |
|-----|----------|-------|----|--------|-----|
| 1/1 | veriana | name | Λr | number | . (|
| v | v Cuana | Hanne | O1 | Humber | |

| | NO – go to 6 NOTE : The Riverine unit can contain depressions flooding | ☐ YES – The wetland class is Riverine s that are filled with water when the river is not |
|----|--|--|
| 6. | Is the entire wetland unit in a topographic depressurface, at some time during the year? <i>This mean of the wetland.</i> | ssion in which water ponds, or is saturated to the ns that any outlet, if present, is higher than the interior |
| | \square NO – go to 7 | \boxtimes YES – The wetland class is Depressional |
| 7. | Is the entire wetland unit located in a very flat are flooding? The unit does not pond surface water maintained by high groundwater in the area. The outlet. | • |
| | □ NO – go to 8 | \square 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 | HGM class to | | |
|---------------------------------------|---------------|--|--|
| being rated | use in rating | | |
| Slope + Riverine | Riverine | | |
| Slope + Depressional | Depressional | | |
| Slope + Lake Fringe | Lake Fringe | | |
| Depressional + Riverine along stream | Depressional | | |
| within boundary of depression | | | |
| Depressional + Lake Fringe | Depressional | | |
| Riverine + Lake Fringe | Riverine | | |
| Salt Water Tidal Fringe and any other | Treat as | | |
| class of freshwater wetland | 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.

| 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 (☐ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing. ☐ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. ☐ Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. | points = 3 | 3 | | | |
| D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions). \square Yes | s = 4 ⊠ No = 0 | 0 | | | |
| D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Coward Wetland has persistent, ungrazed, plants > 95% of area Wetland has persistent, ungrazed, plants > 1/2 of area Wetland has persistent, ungrazed plants > 1/10 of area Wetland has persistent, ungrazed plants < 1/10 of area | lin classes): points = 5 points = 3 points = 1 points = 0 | 5 | | | |
| 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 △ Area seasonally ponded is > ½ total area of wetland △ Area seasonally ponded is < ½ total area of wetland | points = 4 points = 2 points = 0 | 4 | | | |
| Total for D 1 Add the points in the bo | xes above | 12 | | | |
| Rating of Site Potential If score is: \square 12-16 = H \square 6-11 = M \square 0-5 = L Record the | rating on the f | irst 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? \Box Yes = | 1 ⊠ No = 0 | 0 | | | |
| D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? \Box Yes = | 1 ⊠ No = 0 | 0 | | | |
| D 2.3. Are there septic systems within 250 ft of the wetland? \Box 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: | 1 ⊠ No = 0 | 0 | | | |
| Total for D 2 Add the points in the bo | xes above | 0 | | | |
| Rating of Landscape Potential If score is: $\square 3$ or $4 = H$ $\square 1$ or $2 = M$ $\boxtimes 0 = L$ Record the in | ating on the fir | st 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? | 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? \Box 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)? | 2 □ No = 0 | 2 | | | |
| Total for D 3 Add the points in the bo | xes above | 2 | | | |
| Rating of Value If score is: $\square 2-4 = H$ $\square 1 = M$ $\square 0 = L$ Record the | rating on the f | irst page | | | |

| DEPRESSIONAL AND FLATS WETLANDS | |
|--|------------|
| Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation | on |
| 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). ☐ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. ☐ D 4.1. Characteristics of surface water outlet (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ | 4 |
| D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part. □ Marks of ponding are 3 ft or more above the surface or bottom of outlet. □ Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet. □ Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet. □ The wetland is a "headwater" wetland. □ Wetland is flat but has small depressions on the surface that trap water. □ Marks of ponding less than 0.5 ft (6 in). | 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. □ The area of the basin is 10 to 100 times the area of the unit. □ The area of the basin is more than 100 times the area of the unit. □ Entire wetland is in the Flats class. | 0 |
| Total for D 4 Add the points in the boxes above | 4 |
| Rating of Site Potential If score is: \Box 12-16 = H \Box 6-11 = M \boxtimes 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? \square Yes = 1 \square No = 0 | 0 |
| D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? \square Yes = 1 \square No = 0 | 0 |
| D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? \square Yes = 1 \square No = 0 | 0 |
| Total for D 5 Add the points in the boxes above | 0 |
| Rating of Landscape Potential If score is: $\Box 3 = H$ $\Box 1$ or $2 = M$ $\boxtimes 0 = L$ 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 ■ □ 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 | 2 |
| D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? | 0 |
| | _ |
| | 2 |

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 0 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 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 1 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 H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle 1 If you counted: \square > 19 species points = 2 points = 1 \Box < 5 species points = 0H 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. 0 **None** = 0 points ☐ **Moderate** = 2 points \square Low = 1 point All three diagrams in this row are ☐ **HIGH** = 3points

| H 1.5. Special habitat features: Check the habitat features: Check the habitat features: Check the habitat features that are present in the wetland. (? 4 in diameter and 6 ft long). Standing snags (6th > 4 in) within the wetland. (? 4 in diameter and 6 ft long). Standing snags (6th > 4 in) within the wetland. (? 4 in diameter and 6 ft long). Standing snags (6th > 4 in) within the wetland. (? 4 in diameter and 6 ft long). Stable steep banks of fine material that might be used by beaver or musikar for denning (> 30 degree slope) QR signs of recent beaver activity are present (cut shrubs or trees that hove 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 ego-laying by amphiblans). Invasive plants cover less than 25% of the wetland area in every strum of plants (see H 1.1 for list of strato). Add the points in the boxes above 3 | | | | | | | |
|--|--|--------------------------------------|----------------|--|--|--|--|
| 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 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland of a least 3.3 ft (1 m) over a stream (or ditch) in over developed by the wetland of a least 3.3 ft (1 m) over a stream of plants (see the continuation of the wetland see in every stratum of plants (see the 1.1 for list of strato). Total for H 1 | H 1.5. Special habitat features: | | | | | | |
| 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 X ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibions). Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of stratol). Total for H 1 | Check the habitat features that are present in the wetland. The number of check | s is the number of points. | | | | | |
| 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 Danks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed.</i>) At least 1% ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-loying by amphibions</i>). Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strato</i>). Total for H | \square Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft lor | ng). | | | | | |
| 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 X as of thin stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by omphibions). Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strato). Total for H 1 | ☐ Standing snags (dbh > 4 in) within the wetland. | | | | | | |
| 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 X as of thin stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by omphibions). Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strato). Total for H 1 | ☐ Undercut banks are present for at least 6.6 ft (2 m) AND/OR overhanging pla | ints extends at least 3.3 ft (1 m) | | | | | |
| slope) OR signs of recent beaver activity are present (cut shrubs or trees that have not yet weathered where wood is exposed). At least X as 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). 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 80-6 = 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 + [(%moderate and low intensity land uses)/2] = 8% + (0.5%/2) = 8.25% If total accessible habitat is: | <u> </u> | | | | | | |
| slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>). At least <i>X</i> ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>). Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strato</i>). 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 20-6 = 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 <i>only habitat that directly abuts wetland unit</i>). <i>Calculate:</i> % undisturbed habitat + ((%moderate and low intensity land uses)/2] = 8% + (0.5%/2) = 8.25% (fit total accessible habitat is: 10-19% of 1 km Polygon points = 2 2-33.8% of 1 km Polygon points = 2 2-33.8% of 1 km Polygon points = 2 2-33.8% of 1 km Polygon points = 0 H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. <i>Calculate:</i> % undisturbed habitat + ((%moderate and low intensity land uses)/2 = 90.5% + (6.5%/2) = 93.75% (20-65%/2 | ☐ Stable steep banks of fine material that might be used by beaver or muskra | at for denning (> 30 degree | 1 | | | | |
| 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 stratus). Total for H 1 | - | | | | | | |
| permanently or seasonally inundated (structures for egg-laving by amphibians). Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of stratol). Total for H 1 | where wood is exposed). | · | | | | | |
| Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strato). Total for H 1 | ☐ At least ¼ ac of thin-stemmed persistent plants or woody branches are prese | ent in areas that are | | | | | |
| Total for H 1 | permanently or seasonally inundated (structures for egg-laying by amphibia | ns). | | | | | |
| Total for H 1 | ☑ Invasive plants cover less than 25% of the wetland area in every stratum of p | lants (see H 1.1 for list of | | | | | |
| Rating of Site Potential If score is: | | | | | | | |
| 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 + [(%moderate and low intensity land uses)/2] = 8% + (0.5%/2) = 8.25% If total accessible habitat is: | Total for H 1 Add | the points in the boxes above | 3 | | | | |
| 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 + [{%moderate and low intensity land uses}/2] = 8% + (0.5%/2) = 8.25% If total accessible habitat is: | Rating of Site Potential If score is: \Box 15-18 = H \Box 7-14 = M \boxtimes 0-6 = L | Record the rating on t | the first page | | | | |
| H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit). Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2] = 8% + (0.5%/2) = 8.25% If total accessible habitat is: | | | .,, | | | | |
| Colculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2] = 8% + (0.5%/2) = 8.25% If total accessible habitat is: | | or the site! | | | | | |
| If total accessible habitat is: □ > 1/3 (33.3%) of 1 km Polygon □ 20-33% of 1 km Polygon □ 10-19% of 1 km Polygon □ 20-33% of 1 km Polygon □ 20-34.5% □ 20-34 | | | | | | | |
| > 1/3 (33.3%) of 1 km Polygon | Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2] | = 8% + (0.5%/2) = 8.25% | | | | | |
| 20-33% of 1 km Polygon points = 2 points = 1 10-19% of 1 km Polygon points = 1 2 < 10% of 1 km Polygon points = 0 2 < 10% of 1 km Polygon points = 0 4 2.2. Undisturbed habitat in 1 km Polygon around the wetland. Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2 = 90.5% + (6.5%/2) = 93.75% 2 | If total accessible habitat is: | | | | | | |
| 10-19% of 1 km Polygon | $\square > 1/3$ (33.3%) of 1 km Polygon | points = 3 | 0 | | | | |
| X < 10% of 1 km Polygon | ☐ 20-33% of 1 km Polygon | points = 2 | | | | | |
| X < 10% of 1 km Polygon | ☐ 10-19% of 1 km Polygon | points = 1 | | | | | |
| H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2 = 90.5% + (6.5%/2) = 93.75% Undisturbed habitat > 50% of Polygon points = 3 points = 2 points = 1 Undisturbed habitat 10-50% and in 1-3 patches Undisturbed habitat 10-50% and > 3 patches Dundisturbed habitat 10-50% and > 3 patches Dundisturbed habitat > 10% of 1 km Polygon Points = 0 H 2.3. Land use intensity in 1 km Polygon: If Solve of 1 km Polygon is high intensity land use Solve of 1 km Polygon is high intensity and use Solve of 1 km Polygon is high intensity Points = 0 Total for H 2 Add the points in the boxes above Rating of Landscape Potential If score is: □4-6 = H □4-3 = 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: Di thas 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 a wetland of High Conservation Value as determined by the Department of Natural Resources It is a Wetland of High Conservation Value as determined by the Department of Natural Resources 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 Site has 1 or 2 priority habitats (listed on next page) within 100 m | | · | | | | | |
| Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2 = 90.5% + (6.5%/2) = 93.75% ☐ Undisturbed habitat > 50% of Polygon ☐ Doints = 3 ☐ Undisturbed habitat 10-50% and in 1-3 patches ☐ Undisturbed habitat 10-50% and > 3 patches ☐ Undisturbed habitat < 10% of 1 km Polygon ☐ Doints = 0 ☐ Undisturbed habitat < 10% of 1 km Polygon ☐ Points = 0 ☐ Points = (-2) ☐ So% of 1 km Polygon is high intensity land use ☐ So% of 1 km Polygon is high intensity ☐ Points = 0 ☐ Total for H 2 ☐ Add the points in the boxes above ☐ 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. ☐ 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 an 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 | 17 | Į | | | | | |
| ☑ 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 | <u>'</u> | | | | | | |
| Undisturbed habitat 10-50% and in 1-3 patches Undisturbed habitat 10-50% and > 3 patches Undisturbed habitat 10-50% and > 3 patches Undisturbed habitat 10-50% and > 3 patches Undisturbed habitat < 10% of 1 km Polygon Points = 0 H 2.3. Land use intensity in 1 km Polygon: If Solow of 1 km Polygon is high intensity land use Solow of 1 km Polygon is high intensity Points = 0 Total for H 2 Add the points in the boxes above 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 Site has 1 or 2 priority habitats (listed on next page) within 100 m | | | | | | | |
| Undisturbed habitat 10-50% and > 3 patches Undisturbed habitat < 10% of 1 km Polygon Points = 0 H 2.3. Land use intensity in 1 km Polygon: If points = 0 Formall of 1 km Polygon is high intensity land use points = (-2) points = 0 Total for H 2 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 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 Site has 1 or 2 priority habitats (listed on next page) within 100 m | · · | • | 3 | | | | |
| Undisturbed habitat < 10% of 1 km Polygon: If > 50% of 1 km Polygon is high intensity land use points = (-2) 0 ≤ 50% of 1 km Polygon is high intensity points = 0 Total for H 2 | · | · | | | | | |
| H 2.3. Land use intensity in 1 km Polygon: If □ > 50% of 1 km Polygon is high intensity land use □ > 50% of 1 km Polygon is high intensity □ > 50% of 1 km Polygon is high intensity □ > 50% of 1 km Polygon is high intensity □ > 50% of 1 km Polygon is high intensity □ > Add the points in the boxes above 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: □ 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 | · | · | | | | | |
| □ > 50% of 1 km Polygon is high intensity land use □ ≤ 50% of 1 km Polygon is high intensity □ opints = 0 Total for H 2 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: □ 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 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 | | points = 0 | | | | | |
| Total for H 2 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 | | | | | | | |
| Total for H 2 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 | □ > 50% of 1 km Polygon is high intensity land use | points = (- 2) | 0 | | | | |
| 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 | | points = 0 | | | | | |
| 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 | Total for H 2 Add | the points in the boxes above | 3 | | | | |
| 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 | Rating of Landscape Potential If score is: $\Box 4-6 = H \ \Box 1-3 = M \ \Box < 1 = L$ | Record the rating on th | ne first page | | | | |
| 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 | H 3.0. Is the habitat provided by the site valuable to society? | | | | | | |
| 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 | H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? | Choose only the highest score | | | | | |
| □ 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 | | | | | | | |
| □ 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 | Site meets ANY of the following criteria: | points = 2 | | | | | |
| □ 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 | \square It has 3 or more priority habitats within 100 m (see next page) | | | | | | |
| □ 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 | $\hfill \square$ It provides habitat for Threatened or Endangered species (any plant or a | nimal on the state or federal lists) | | | | | |
| □ 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 | \square It is mapped as a location for an individual WDFW priority species | | 1 | | | | |
| 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 | $\ \square$ It is a Wetland of High Conservation Value as determined by the Departr | nent of Natural Resources | | | | | |
| Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1 po | $\ \square$ 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 does not meet any of the criteria above points = 0 | | | | | | | |
| | ☐ Site does not meet any of the criteria above | points = 0 | | | | | |

Rating of Value If score is: $\Box 2 = H \boxtimes 1 = M \Box 0 = L$

Record the rating on the first page

WDFW Priority Habitats

<u>Priority habitats listed by WDFW</u> (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.

| \square 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 (<i>full descriptions in WDFW PHS report</i>). |
| \square 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 (<i>full descriptions in WDFW PHS report p. 158 – see web link above</i>). |
| \square 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 (<i>full descriptions in WDFW PHS report p. 161 – see web link above</i>). |
| ☐ 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. (<i>full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page</i>). |
| \Box 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. |
| \Box Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation. |
| \Box Talus: Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, 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.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

| Wetland Type | Category |
|--|----------|
| Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met. | |
| SC 1.0. Estuarine wetlands | |
| Does the wetland meet the following criteria for Estuarine wetlands? | |
| ☐ The dominant water regime is tidal, | |
| \square Vegetated, and | |
| ☐ With a salinity greater than 0.5 ppt ☐ Yes –Go to SC 1.1 ☒ No= Not an estuarine wetland | |
| 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? | Cat. I |
| Yes = Category I □ No - Go to SC 1.2 | |
| 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 | Cat. I |
| less than 10% cover of non-native plant species. (If non-native species are <i>Spartina</i> , see page 25) | |
| | |
| \square At least ${}^{3}\!\!\!\!/$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un- mowed grassland. | Cat. II |
| | |
| □ 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 | |
| of contiguous freshwater wetlands. | |
| 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? \times Yes - Go to SC 2.2 \times No - Go to SC 2.3 | |
| SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? | |
| http://www.dnr.wa.gov/NHPwetlandviewer | |
| SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? | Cat. I |
| http://file.dnr.wa.gov/publications/amp_nh_wetlands_trs.pdf | |
| \Box Yes – Contact WNHP/WDNR and go to SC 2.4 \Box 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? | |
| SC 3.0. Bogs | |
| Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key</i> | |
| 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? \Box Yes – Go to SC 3.3 \boxtimes 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? \square Yes – Go to SC 3.3 \square 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% | Cat. I |
| 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 | |

| 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? <i>If you answer YES you will still need to rate the wetland based on its functions.</i> □ 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). | Cat. I |
| ☐Yes = Category I ☐No = Not a forested wetland for this section | |
| SC 5.0. Wetlands in Coastal Lagoons | |
| Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? | |
| \Box 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 | Cat. I |
| bottom) | . |
| ☐ 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? | |
| \square The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has | Cat. II |
| less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). | |
| \square At least $rac{3}{4}$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | |
| un- mowed grassland. \Box 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: | Cat I |
| ☐ Long Beach Peninsula: Lands west of SR 103 | |
| ☐ Grayland-Westport: Lands west of SR 105 | |
| \square Ocean Shores-Copalis: Lands west of SR 115 and SR 109 | Cat. II |
| \square Yes – Go to SC 6.1 \square No = not an interdunal wetland for rating | Cat. II |
| 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)? \Box Yes = Category I \Box No – Go to SC 6.2 | Cat. III |
| 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 | |
| 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 |
| Tes - Category III LINO - Category IV | |
| | |
| Category of wetland based on Special Characteristics | NI A |
| If you answered No for all types, enter "Not Applicable" on Summary Form | NA |

Wetland name or number: Click here to enter text.

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RATING SUMMARY – Western Washington

Name of wetland (or ID #): RR Date of site visit: 2/19/2021

Rated by: Sam Payne and Roen Hohlfeld Trained by Ecology? $\boxtimes Y \square N$ Date of training: 9/2017

HGM Class used for rating: <u>Depressional</u> 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: Google Earth, Pierce County

OVERALL WETLAND CATEGORY (based on functions ⊠ or special characteristics □)

1. Category of wetland based on FUNCTIONS

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

| FUNCTION | Improving Water Quality | | Hydrologic | | Habitat | | | | | |
|------------------------|-------------------------|---|------------|----------|----------|--------|-------|----------|----------|-------|
| | | | | | Circle t | the ap | propr | iate ra | tings | |
| Site Potential | Н | M | L | Н | M | L | Н | М | <u>L</u> | |
| Landscape Potential | Н | М | <u>L</u> | Н | M | L | Н | <u>M</u> | L | |
| Value | <u>H</u> | М | L | <u>H</u> | М | L | Н | M | L | TOTAL |
| Score Based on Ratings | | 6 | | | 7 | | | 5 | | 18 |

Score for each function based on three ratings (order of ratings is not important) 9 = H,H,H8 = H,H,M7 = 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 | | \boxtimes |

Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

| Map of: | To answer questions: | Figure # |
|---|----------------------|----------|
| Cowardin plant classes | D 1.3, H 1.1, H 1.4 | 1 |
| Hydroperiods | D 1.4, H 1.2 | 2 |
| Location of outlet (can be added to map of hydroperiods) | D 1.1, D 4.1 | 2 |
| Boundary of area within 150 ft of the wetland (can be added to another figure) | D 2.2, D 5.2 | 2 |
| Map of the contributing basin | D 4.3, D 5.3 | 3 |
| 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 | 4 |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website) | D 3.1, D 3.2 | 5 |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web) | D 3.3 | 6 |

HGM Classification of Wetlands in Western Washington

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you

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

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? \boxtimes NO – go to 2 \square **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. **YES** - The wetland class is **Flats** \boxtimes NO – go to 3 If your wetland can be classified as a Flats wetland, use the form for **Depressional** wetlands.

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

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

 \square At least 30% of the open water area is deeper than 6.6 ft (2 m).

plants on the surface at any time of the year) at least 20 ac (8 ha) in size;

- \boxtimes 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 vegetated part of the wetland is on the shores of a body of permanent open water (without any

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

☑ The water leaves the wetland **without being impounded**.

 \boxtimes NO – go to 5

 \boxtimes NO – go to 4

 \square **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,
 - \Box The overbank flooding occurs at least once every 2 years.

| W | etland | name | or | number: | RR |
|---|--------|------|----|---------|----|
|---|--------|------|----|---------|----|

| | NO – go to 6 NOTE : The Riverine unit can contain depression flooding | □ YES – The wetland class is Riverine is that are filled with water when the river is not |
|----|---|--|
| 6. | 1 0 1 | ession in which water ponds, or is saturated to the ans that any outlet, if present, is higher than the interior |
| | \square NO – go to 7 | oxtimes YES – The wetland class is Depressional |
| 7. | Is the entire wetland unit located in a very flat an flooding? The unit does not pond surface water maintained by high groundwater in the area. The outlet. | - |
| | □ NO – go to 8 | \square 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 | HGM class to | | |
|---------------------------------------|---------------|--|--|
| being rated | use in rating | | |
| Slope + Riverine | Riverine | | |
| Slope + Depressional | Depressional | | |
| Slope + Lake Fringe | Lake Fringe | | |
| Depressional + Riverine along stream | Depressional | | |
| within boundary of depression | | | |
| Depressional + Lake Fringe | Depressional | | |
| Riverine + Lake Fringe | Riverine | | |
| Salt Water Tidal Fringe and any other | Treat as | | |
| class of freshwater wetland | 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.

| DEPRESSIONAL AND FLATS WETLANDS | | | | |
|--|------------------|-----------|--|--|
| Water Quality Functions - Indicators that the site functions to improve wate | r 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 (representation). | | | | |
| \square Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing | points = 3 | 2 | | |
| Wetland has an intermittently nowing stream of ditch, OK nightly constricted permanently nowing | points = 2 | 3 | | |
| $\ \square$ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. | points = 1 | | | |
| $\ \square$ 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 Coward | in classes): | | | |
| ☑ Wetland has persistent, ungrazed, plants > 95% of area | points = 5 | | | |
| \square Wetland has persistent, ungrazed, plants > 1/2 of area | points = 3 | 5 | | |
| \square Wetland has persistent, ungrazed plants > 1/10 of area | points = 1 | | | |
| \square 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 | 2 | | |
| □ Area seasonally ponded is > ¼ total area of wetland | points = 2 | | | |
| ☐ Area seasonally ponded is < ¼ total area of wetland | points = 0 | | | |
| Total for D 1 Add the points in the box | es above | 10 | | |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 0-5 = L Record the | rating on the f | irst 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? \Box Yes = 3 | 1 ⊠ No = 0 | 0 | | |
| D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? \Box Yes = 3 | 1 ⊠ No = 0 | 0 | | |
| D 2.3. Are there septic systems within 250 ft of the wetland? \Box Yes = 2 | 1 ⊠ No = 0 | 0 | | |
| D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in | _ | 0 | | |
| · | L ⊠ No = 0 | | | |
| Total for D 2 Add the points in the box | es above | 0 | | |
| Rating of Landscape Potential If score is: $\square 3$ or $4 = H$ $\square 1$ or $2 = M$ $\boxtimes 0 = L$ Record the relationship. | ating on the fir | st 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 | | 0 | | |
| water that is on the 303(d) list? \Box Yes = 3 | 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? \Box Yes = 3 | 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)? $	extstyle 	extstyle $ | 2 □ No = 0 | 2 | | |
| Total for D 3 Add the points in the box | es above | 2 | | |
| Rating of Value If score is: $\boxtimes 2-4 = H \square 1 = M \square 0 = L$ Record the | rating on the f | irst page | | |

| DEPRESSIONAL AND FLATS WETLANDS | | | | | | |
|---|------------|--|--|--|--|--|
| Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation | | | | | | |
| D 4.0. Does the site have the potential to reduce flooding and erosion? | | | | | | |
| D 4.1. Characteristics of surface water outflows from the wetland: | | | | | | |
| oxtimes Wetland is a depression or flat depression with no surface water leaving it (no outlet). points = 4 | | | | | | |
| \square Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently | 4 | | | | | |
| flowing outlet. points = 2 | 4 | | | | | |
| \square Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1 | | | | | | |
| ☐ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. points = 0 | | | | | | |
| D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands | | | | | | |
| with no outlet, measure from the surface of permanent water or if dry, the deepest part. | | | | | | |
| ☐ Marks of ponding are 3 ft or more above the surface or bottom of outlet. points = 7 | | | | | | |
| ☐ Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet. points = 5 | 0 | | | | | |
| ☐ 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. | | | | | | |
| \Box The area of the basin is less than 10 times the area of the unit. points = 5 | 3 | | | | | |
| extstyle 	ext | | | | | | |
| \Box 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 | 7 | | | | | |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 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? \square Yes = 1 \square No = 0 | 0 | | | | | |
| D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? \boxtimes Yes = 1 \square 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 | 0 | | | | | |
| >1 residence/ac, urban, commercial, agriculture, etc.)? ☐ Yes = 1 ☐ No = 0 | U | | | | | |
| Total for D 5 Add the points in the boxes above | 1 | | | | | |
| Rating of Landscape Potential If score is: $\Box 3 = H \ \Box 1 \text{ or } 2 = M \ \Box 0 = L$ 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 | | | | | | |
| ● ☐ Surface flooding problems are in a sub-basin farther down-gradient. points = 1 | 2 | | | | | |
| \square Flooding from groundwater is an issue in the sub-basin. points = 1 | 2 | | | | | |
| \Box 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? | | | | | | |
| | 0 | | | | | |
| | 0 2 | | | | | |

| 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 | 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 □ Seasonally flooded or inundated □ Occasionally flooded or inundated □ Saturated only □ Permanently flowing stream or river in, or adjacent to, the wetland □ Seasonally flowing stream in, or adjacent to, the wetland □ Lake Fringe wetland □ Freshwater tidal wetland □ Seasonally flowing stream of the wetland □ Lake Fringe wetland □ Seasonally flowing stream of the wetland □ Lake Fringe wetland □ Seasonally flowing stream of the wetland □ Lake Fringe wetland □ Seasonally flowing stream of the wetland □ Lake Fringe wetland □ Seasonally flowing stream of the wetland □ Lake Fringe wetland □ Seasonally flowing stream of the wetland □ Lake Fringe wetland □ Seasonally flowing stream of the wetland □ Lake Fringe wetland □ Seasonally flowing stream of the wetland | 1 | | | | |
| H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle If you counted: | 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 All three diagrams in this row are HIGH = 3points | 0 | | | | |

| H 1.5. Special habitat features: | | |
|--|--------------------------------|----------------|
| Check the habitat features that are present in the wetland. <i>The number of checks is the</i> | e 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. | | |
| | tands at least 2.2 ft (1 m) | |
| Undercut banks are present for at least 6.6 ft (2 m) AND/OR overhanging plants ex over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m) | | |
| | | 3 |
| Stable steep banks of fine material that might be used by beaver or muskrat for or | | J |
| slope) OR signs of recent beaver activity are present (cut shrubs or trees that haw where wood is exposed). | ve not yet weathered | |
| ☐ At least ¼ ac of thin-stemmed persistent plants or woody branches are present in a | uroas that are | |
| permanently or seasonally inundated (structures for egg-laying by amphibians). | ireas triat are | |
| Invasive plants cover less than 25% of the wetland area in every stratum of plants (| coa U 1 1 for list of | |
| strata). | see n 1.1 joi iist oj | |
| · | oints in the boxes above | 5 |
| · | | |
| Rating of Site Potential If score is: \Box 15-18 = H \Box 7-14 = M \boxtimes 0-6 = L | Record the rating on t | 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 + [(%moderate and low intensity land uses)/2] = 7.5 | % + (0.5%/2) = 7.75% | |
| If total accessible habitat is: | | |
| \square > 1/3 (33.3%) of 1 km Polygon | points = 3 | 0 |
| ☐ 20-33% of 1 km Polygon | points = 2 | |
| ☐ 10-19% of 1 km Polygon | points = 1 | |
| □ 10-15% of 1 km r olygon □ < 10% of 1 km Polygon | points = 0 | |
| 12 | points – o | |
| H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. | (440/ (2) 04 = 0/ | |
| Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2 = 86% | | |
| ☐ Undisturbed habitat > 50% of Polygon | points = 3 | 3 |
| ☐ Undisturbed habitat 10-50% and in 1-3 patches | points = 2 | J |
| ☐ Undisturbed habitat 10-50% and > 3 patches | points = 1 | |
| ☐ Undisturbed habitat < 10% of 1 km Polygon | points = 0 | |
| H 2.3. Land use intensity in 1 km Polygon: If | | |
| $\square >$ 50% of 1 km Polygon is high intensity land use | points = (- 2) | 0 |
| | points = 0 | |
| | oints in the boxes above | 3 |
| Rating of Landscape Potential If score is: □4-6 = H □1-3 = M □<1 = L | Record the rating on th | ne 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? <i>Choose</i> | e 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 of the control | on the state or federal lists) | _ |
| ☐ It is mapped as a location for an individual WDFW priority species | | 1 |
| ☐ It is a Wetland of High Conservation Value as determined by the Department o | | |
| ☐ It has been categorized as an important habitat site in a local or regional comp | rehensive plan, | |
| in a Shoreline Master Plan, or in a watershed plan | noints = 1 | |
| ☑ Site has 1 or 2 priority habitats (listed on next page) within 100 m☐ Site does not meet any of the criteria above | points = 1 points = 0 | |
| L L DUE OUES HOLDERLAUV OF THE CHIEFIA ADOVE | points = U | |

Rating of Value If score is: $\Box 2 = H \boxtimes 1 = M \Box 0 = L$

Record the rating on the first page

WDFW Priority Habitats

<u>Priority habitats listed by WDFW</u> (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.

| \square 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 (<i>full descriptions in WDFW PHS report</i>). |
| \square Herbaceous Balds: Variable size patches of grass and forbs on shallow soils over bedrock. |
| \Box Old-growth/Mature forests: <u>Old-growth west of Cascade crest</u> – 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. <u>Mature forests</u> – 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 (<i>full descriptions in WDFW PHS report p. 158 – see web link above</i>). |
| \square Riparian : The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other. |
| \square Westside Prairies: Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (<i>full descriptions in WDFW PHS report p. 161 – see web link above</i>). |
| ☐ 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. (<i>full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page</i>). |
| \Box 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. |
| \Box Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation. |
| \Box Talus: Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, and or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs. |
| \boxtimes 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.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

| Wetland Type | Category |
|--|----------|
| Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met. | |
| SC 1.0. Estuarine wetlands | |
| Does the wetland meet the following criteria for Estuarine wetlands? | |
| ☐ The dominant water regime is tidal, | |
| \square Vegetated, and | |
| ☐ With a salinity greater than 0.5 ppt ☐ Yes –Go to SC 1.1 ☒ No= Not an estuarine wetland | |
| 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? | Cat. I |
| Yes = Category I □ No - Go to SC 1.2 | |
| 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 | Cat. I |
| less than 10% cover of non-native plant species. (If non-native species are <i>Spartina</i> , see page 25) | |
| | |
| \square At least ${}^{3}\!\!\!\!/$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un- mowed grassland. | Cat. II |
| | |
| □ 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 | |
| of contiguous freshwater wetlands. | |
| 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? \times Yes - Go to SC 2.2 \times No - Go to SC 2.3 | |
| SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? | |
| http://www.dnr.wa.gov/NHPwetlandviewer □Yes = Category I ☑No = Not a WHCV | |
| SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? | Cat. I |
| http://file.dnr.wa.gov/publications/amp_nh_wetlands_trs.pdf | |
| \Box Yes – Contact WNHP/WDNR and go to SC 2.4 \Box 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? | |
| SC 3.0. Bogs | |
| Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key</i> | |
| 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? \Box Yes – Go to SC 3.3 \boxtimes 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? \Box Yes – Go to SC 3.3 \boxtimes 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% | Cat. I |
| 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 | |

| 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? <i>If you answer YES you will still need to rate the wetland based on its functions.</i> □ 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). | Cat. I |
| □Yes = Category I ⊠No = Not a forested wetland for this section | |
| 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) ☐ 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). ☐ At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. ☐ The wetland is larger than ¹/₁₀ ac (4350 ft²) ☐ Yes = Category I ☐ No = Category II | Cat. 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 Ocean Shores-Copalis: Lands west of SR 115 and SR 109 Yes – Go to SC 6.1 No = not an interdunal wetland for rating | Cat I Cat. II |
| 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)? 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 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. III Cat. IV |
| Category of wetland based on Special Characteristics If you answered No for all types, enter "Not Applicable" on Summary Form | NA |

Wetland name or number: Click here to enter text.

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RATING SUMMARY – Western Washington

Name of wetland (or ID #): <u>SS</u> Date of site visit: <u>2/19/2021</u>

Rated by: <u>Sam Payne and Roen Hohlfeld</u> Trained by Ecology? ⊠Y □N Date of training: <u>9/2017</u>

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: Google Earth, Pierce County

OVERALL WETLAND CATEGORY (based on functions ⊠ or special characteristics □)

1. Category of wetland based on FUNCTIONS

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

| FUNCTION | Improving Water Quality | | Hydrologic | | Habitat | | | | | |
|------------------------|--------------------------------|---|------------|----------|---------|----------|---|----------|----------|-------|
| | Circle the appropriate ratings | | | | | | | | | |
| Site Potential | Н | M | L | Н | М | <u>L</u> | Н | М | <u>L</u> | |
| Landscape Potential | Н | М | <u>L</u> | Н | М | <u>L</u> | Н | <u>M</u> | L | |
| Value | <u>H</u> | М | L | <u>H</u> | М | L | Н | M | L | TOTAL |
| Score Based on Ratings | | 6 | | | 5 | | | 5 | | 16 |

Score for each function based on three ratings (order of ratings is not important) 9 = H,H,H

- 9 H,H,F
- 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 | CATI | ATEGORY | | |
|------------------------------------|------|-------------|--|--|
| 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 | | \boxtimes | | |

Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

| Map of: | To answer questions: | Figure # |
|---|----------------------|----------|
| Cowardin plant classes | D 1.3, H 1.1, H 1.4 | 1 |
| Hydroperiods | D 1.4, H 1.2 | 2 |
| Location of outlet (can be added to map of hydroperiods) | D 1.1, D 4.1 | 2 |
| Boundary of area within 150 ft of the wetland (can be added to another figure) | D 2.2, D 5.2 | 2 |
| Map of the contributing basin | D 4.3, D 5.3 | 3 |
| 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 | 4 |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website) | D 3.1, D 3.2 | 5 |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web) | D 3.3 | 6 |

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

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 en | tire unit usually controlled by tides except during floods? |
|----|---|---|
| | ⊠NO – go to 2 | \square YES – the wetland class is Tidal Fringe – go to 1.1 |
| 1 | 1.1 Is the salinity of the water d | uring periods of annual low flow below 0.5 ppt (parts per thousand)? |
| | | fied as a Freshwater Tidal Fringe use the forms for Riverine wetlands. If it s an Estuarine wetland and is not scored. This method cannot be used to |
| 2. | | and precipitation is the only source (>90%) of water to it. Groundwater NOT sources of water to the unit. |
| | \boxtimes NO – go to 3 If your wetland can be classified | \square YES – The wetland class is Flats ed as a Flats wetland, use the form for Depressional wetlands. |
| 3. | ☐ The vegetated part of the w plants on the surface at any | meet all of the following criteria? retland is on the shores of a body of permanent open water (without any y time of the year) at least 20 ac (8 ha) in size; ater area is deeper than 6.6 ft (2 m). |
| | ⊠N0 – go to 4 | \square YES – The wetland class is Lake Fringe (Lacustrine Fringe) |
| 4. | ☑ The wetland is on a slope (a☑ The water flows through the seeps. It may flow subsurf | meet all of the following criteria? Slope can be very gradual), e wetland in one direction (unidirectional) and usually comes from face, as sheetflow, or in a swale without distinct banks, and without being impounded. |
| | \boxtimes NO – go to 5 | \Box YES – The wetland class is Slope |
| | | ot pond in these type of wetlands except occasionally in very small and d hummocks (depressions are usually <3 ft diameter and less than 1 ft |
| 5. | ☐ The unit is in a valley, or stream or river, | meet all of the following criteria? ream channel, where it gets inundated by overbank flooding from that ars at least once every 2 years. |

| Wetland name | or num | ber: | SS |
|--------------|--------|------|----|
|--------------|--------|------|----|

| | NO – go to 6NOTE: The Riverine unit can contain depressions flooding | ☐ YES – The wetland class is Riverine that are filled with water when the river is not |
|----|--|---|
| 6. | Is the entire wetland unit in a topographic depressurface, at some time during the year? <i>This mean of the wetland.</i> | sion in which water ponds, or is saturated to the as that any outlet, if present, is higher than the interior |
| | \square NO – go to 7 | oxtimes YES – The wetland class is Depressional |
| 7. | Is the entire wetland unit located in a very flat are flooding? The unit does not pond surface water n maintained by high groundwater in the area. The outlet. | • |
| | □NO – go to 8 | \square 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 | Depressional |
| within boundary of depression | |
| Depressional + Lake Fringe | Depressional |
| Riverine + Lake Fringe | Riverine |
| Salt Water Tidal Fringe and any other | Treat as |
| class of freshwater wetland | 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.

| 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 ☐ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing of ☐ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. | points = 3 putlet. points = 2 points = 1 points = 1 | 3 |
| □ Wetland has persistent, ungrazed, plants > 1/2 of area □ Wetland has persistent, ungrazed plants > 1/10 of area | classes): points = 5 points = 3 points = 1 points = 0 | 5 |
| ☐ Area seasonally ponded is > ¼ total area of wetland | points = 4 points = 2 points = 0 | 0 |
| Total for D 1 Add the points in the boxes | s above | 8 |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 0-5 = L Record the ra | nting on the first | t 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? \Box Yes = 1 | ⊠ No = 0 | 0 |
| D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? \Box Yes = 1 | ⊠ No = 0 | 0 |
| D 2.3. Are there septic systems within 250 ft of the wetland? \Box 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: | ⊠ No = 0 | 0 |
| Total for D 2 Add the points in the boxes | s above | 0 |
| Rating of Landscape Potential If score is: $\square 3$ or $4 = H$ $\square 1$ or $2 = M$ $\boxtimes 0 = L$ Record the ratio | ing on the first p | 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? | ⊠ 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? \Box 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)? | □ No = 0 | 2 |
| Total for D 3 Add the points in the boxes | s above | 2 |
| Rating of Value If score is: $\boxtimes 2-4 = H \square 1 = M \square 0 = L$ Record the ra | ating on the first | page |

| D 4.0. Does the site have the potential to reduce flooding and erosion? D 4.1. Characteristics of surface water outflows from the wettand: Wetland is a depression or flat depression with no surface water leaving it (no outlet). points = 4 | | DEPRESSIONAL AND FLATS WETLANDS | |
|---|--|---------------------------------|--|
| 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). Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. points = 2 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 obove the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the depest part. Wetland has an unconstricted, or slightly constricted, surface on bottom of outlet. | Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation | | |
| 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 ditch. points = 1 wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1 points = 1 wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. points = 0 points = 1 wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. points = 0 points = 1 points = 1 points = 3 points = 3 to more above the surface or bottom of outlet. points = 5 points = 6 points = 5 points = 6 points = 6 points = 5 points = 6 poi | D 4.0. Does the site have the potential to reduce flooding and erosion? | | |
| Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. Wetland has a depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1 | D 4.1. Characteristics of surface water outflows from the wetland: | | |
| flowing outlet: Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 0 | ☑ Wetland is a depression or flat depression with no surface water leaving it (no outlet). points = 4 | | |
| Howing outlet. Points = 2 Points = 2 Points = 1 | ☐ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently | 4 | |
| Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. points = 0 D4.2. Depth of storage during wet periods. Estimate the helph of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if day, the deepest part. points = 7 Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet. points = 5 Marks af ponding between 2 ft to < 3 ft from surface or bottom of outlet. points = 3 Marks af ponding between 2 ft to < 3 ft from surface or bottom of outlet. points = 3 Marks af ponding less than 0.5 ft (6 in). points = 0 Marks of pondin | flowing outlet. points = 2 | 4 | |
| D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part. Marks of ponding are 3 ft or more above the surface or bottom of outlet. | ☐ Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1 | | |
| 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. | \square Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. points = 0 | | |
| Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet. | with no outlet, measure from the surface of permanent water or if dry, the deepest part. | | |
| Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet. points = 3 points = 1 points = 0 points = | · · · · · · · · · · · · · · · · · · · | | |
| The wetland is a "headwater" wetland. Wetland is flat but has small depressions on the surface that trap water. points = 1 points = 0 points = 0 | | 0 | |
| Wetland is flat but has small depressions on the surface that trap water. points = 1 points = 0 | ' | | |
| Marks of ponding less than 0.5 ft (6 in). 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 lot 0 100 times the area of the unit. The area of the basin is 10 to 100 times the area of the unit. The area of the basin is more than 100 times the area of the unit. Entire wetland is in the Flats class. Total for D4 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? D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? □Yes = 1 ⋈ No = 0 D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land use (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? Total for D 5 Add the points in the boxes above 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 cupit being rated. Do not add points. Choose the highest score if more than one condition is met. The wetland cupit being rated. Do not add points. Choose the highest score if more than one condition is met. The wetland cupit being rated. Do not add points. Choose the highest score if more than one condition is met. Plooding from groundwater is an issue in the sub-basin farther down-gradient into areas where flooding has damaged human or natural resource (e.g., houses or salmon redds): □ □ Chooking from groundwater is an issue in the sub-basin farther down-gradient of unit. □ □ Chooking from groundwater is an issue in the sub-basin farther down-gradient of unit. □ D control of the wetland control plan? □ Chooking from groundwater is an i | ' ' | | |
| 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. The area of the basin is 10 to 100 times the area of the unit. The area of the basin is more than 100 times the area of the unit. The area of the basin is more than 100 times the area of the unit. The area of the basin is more than 100 times the area of the unit. Doints = 0 Doints = 0 Doints = 5 Total for D 4 Rating of Site Potential If score is: | | | |
| contributing surface water to the wetland to the area of the wetland unit itself. ☐ The area of the basin is 10 to 100 times the area of the unit. ☐ The area of the basin is 10 to 100 times the area of the unit. ☐ The area of the basin is 10 to 100 times the area of the unit. ☐ The area of the basin is 10 to 100 times the area of the unit. ☐ Doints = 0 | | | |
| The area of the basin is less than 10 times the area of the unit. points = 5 points = 3 points = 5 | | | |
| The area of the basin is 10 to 100 times the area of the unit. points = 3 points = 0 Entire wetland is in the Flats class. Points = 0 points = 0 Entire wetland is in the Flats class. Points = 0 points = 0 Entire wetland is in the Flats class. Points = 0 Entire wetland is in the Flats class. Points = 0 Entire wetland is in the Flats class. Points = 0 Entire wetland is in the Flats class. Points = 0 Entire wetland is in the Flats class. Points = 0 Entire wetland is in the Flats class. Points = 0 Entire wetland is in the Basin is more than 100 times the area within 150 ft of the Web-11 = M ⊗0-5 = L Record the rating on the first page D 5.0. Does the wetland receive stormwater discharges? Pes = 1 ⊗ No = 0 D 5.2. Its >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? Pes = 1 ⊗ No = 0 D 5.3. Its 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.)? Add the points in the boxes above O Rating of Landscape Potential If score is: □ ∃ | | 0 | |
| Entire wetland is in the Flats class. Total for D 4 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? D 5.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate excess runoff? □Yes = 1 ⊠ No = 0 D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? D 6.3. 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.)? D 6.0. Are then hydrologic functions provided by the site valuable to society? 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 flaghest 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): □ □ Surface flooding problems are in a sub-basin farther down-gradient of unit. □ □ Surface flooding problems are in a sub-basin farther down-gradient of unit. □ □ 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: □ □ 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: □ □ There are no problems with flooding downstream of the wetland. D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional f | · | | |
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| | >1 residence/ac, urban, commercial, agriculture, etc.)? | 0 first page | |

| These questions apply to wetlands of all HGM classes. | | |
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| 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 Emergent Scrub-shrub (areas where shrubs have > 30% cover) Forested (areas where trees have > 30% cover) 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 □ Seasonally flooded or inundated □ Occasionally flooded or inundated □ Saturated only □ Permanently flowing stream or river in, or adjacent to, the wetland □ Seasonally flowing stream in, or adjacent to, the wetland □ Lake Fringe wetland □ Freshwater tidal wetland □ Permanently flowing stream or river in, or adjacent to, the wetland □ Lake Fringe wetland □ Permanently flowing stream in, or adjacent to, the wetland □ Lake Fringe wetland □ Permanently flowing stream in, or adjacent to, the wetland □ Lake Fringe wetland □ Permanently flowing stream in, or adjacent to, the wetland □ Lake Fringe wetland □ Permanently flowing stream in, or adjacent to, the wetland | 1 | |
| H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle If you counted: > 19 species points = 2 > 5 - 19 species points = 1 > 5 species | 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 All three diagrams in this row are HIGH = 3points | 0 | |

| H 1.5. Special habitat features: Check the habitat features that are present in the wetland. The number of € Large, downed, woody debris within the wetland (> 4 in diameter and 6 Standing snags (dbh > 4 in) within the wetland. Undercut banks are present for at least 6.6 ft (2 m) AND/OR overhanging over a stream (or ditch) in, or contiguous with the wetland, for at least 3. | ft long). In plants extends at least 3.3 ft (1 m) | |
|--|--|---------------|
| Stable steep banks of fine material that might be used by beaver or m slope) OR signs of recent beaver activity are present (cut shrubs or trewhere wood is exposed). At least ¼ ac of thin-stemmed persistent plants or woody branches are permanently or seasonally inundated (structures for egg-laying by ample) | uskrat for denning (> 30 degree ees that have not yet weathered oresent in areas that are | 2 |
| oxtimes Invasive plants cover less than 25% of the wetland area in every stratum strata). | n of plants (see H 1.1 for list of | |
| Total for H 1 | Add the points in the boxes above | 4 |
| Rating of Site Potential If score is: \Box 15-18 = H \Box 7-14 = M \boxtimes 0-6 = L | Record the rating on t | he first page |
| H 2.0. Does the landscape have the potential to support the habitat function | ons of the site? | |
| H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>). **Calculate: % undisturbed habitat + [(%moderate and low intensity land use: If total accessible habitat is: > 1/3 (33.3%) of 1 km Polygon 20-33% of 1 km Polygon 10-19% of 1 km Polygon | points = 3 points = 2 points = 1 | 0 |
| < 10% of 1 km Polygon H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. Calculate: % undisturbed habitat + [(%moderate and low intensity land uses □ Undisturbed habitat > 50% of Polygon □ Undisturbed habitat 10-50% and in 1-3 patches □ Undisturbed habitat 10-50% and > 3 patches □ Undisturbed habitat < 10% of 1 km Polygon | points = 0 s)/2 = 86% + (11%/2) = 91.5% points = 3 points = 2 points = 1 points = 0 | 3 |
| H 2.3. Land use intensity in 1 km Polygon: If □ > 50% of 1 km Polygon is high intensity land use ⊠ ≤ 50% of 1 km Polygon is high intensity | points = (- 2) points = 0 | 0 |
| Total for H 2 | Add the points in the boxes above | 3 |
| Rating of Landscape Potential If score is: $\Box 4-6 = H \boxtimes 1-3 = M \Box < 1 = L$ | Record the rating on th | e 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 police that applies to the wetland being rated. Site meets ANY of the following criteria: ☐ It has 3 or more priority habitats within 100 m (see next page) ☐ It provides habitat for Threatened or Endangered species (any plant) ☐ It is mapped as a location for an individual WDFW priority species ☐ It is a Wetland of High Conservation Value as determined by the De ☐ It has been categorized as an important habitat site in a local or region in a Shoreline Master Plan, or in a watershed plan ☐ Site has 1 or 2 priority habitats (listed on next page) within 100 m ☐ Site does not meet any of the criteria above | points = 2 or animal on the state or federal lists) partment of Natural Resources | 1 |

Rating of Value If score is: $\Box 2 = H \boxtimes 1 = M \Box 0 = L$

Record the rating on the first page

WDFW Priority Habitats

<u>Priority habitats listed by WDFW</u> (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.

| \square 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 (<i>full descriptions in WDFW PHS report</i>). |
| \square Herbaceous Balds: Variable size patches of grass and forbs on shallow soils over bedrock. |
| \Box Old-growth/Mature forests: <u>Old-growth west of Cascade crest</u> – 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. <u>Mature forests</u> – 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 (<i>full descriptions in WDFW PHS report p. 158 – see web link above</i>). |
| \square Riparian : The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other. |
| \square Westside Prairies: Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (<i>full descriptions in WDFW PHS report p. 161 – see web link above</i>). |
| ☐ 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. (<i>full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page</i>). |
| \Box 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. |
| \Box Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation. |
| \Box Talus: Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, and or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs. |
| \boxtimes 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

Wetland Rating System for Western WA: 2014 Update Rating Form – Effective January 1, 2015

elsewhere.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

| Wetland Type | Category |
|--|----------|
| Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met. | |
| SC 1.0. Estuarine wetlands | |
| Does the wetland meet the following criteria for Estuarine wetlands? | |
| \square 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 | |
| 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? | Cat. I |
| \Box Yes = Category I \Box No - Go to SC 1.2 | Cut. 1 |
| | |
| SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? | Cat. I |
| ☐ The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has | Cat. i |
| less than 10% cover of non-native plant species. (If non-native species are <i>Spartina</i> , see page 25) | |
| \square At least $lpha$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | Cat. II |
| un- mowed grassland. | Cat. II |
| \square 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 | |
| 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? | |
| — | |
| SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? | |
| http://www.dnr.wa.gov/NHPwetlandviewer □Yes = Category I □No = Not a WHCV | Cat. I |
| SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? | |
| http://file.dnr.wa.gov/publications/amp_nh_wetlands_trs.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? | |
| <u> </u> | |
| 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? \Box Yes – Go to SC 3.3 \boxtimes 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? \Box Yes – Go to SC 3.3 \boxtimes 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% | Cat. I |
| 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 | |

| 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? <i>If you answer YES you will still need to rate the wetland based on its functions.</i> □ 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). | Cat. I |
| ☐Yes = Category I ⊠No = Not a forested wetland for this section | |
| SC 5.0. Wetlands in Coastal Lagoons | |
| Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? | |
| \Box 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 図 No = Not a wetland in a coastal lagoon | |
| SC 5.1. Does the wetland meet all of the following three conditions? | |
| \square The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has | Cat. II |
| less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). | |
| \square At least $rac{1}{2}$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. | |
| \Box 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)? \emph{If} | |
| you answer yes you will still need to rate the wetland based on its habitat functions. | Cat I |
| In practical terms that means the following geographic areas: | 55.1 |
| ☐ Long Beach Peninsula: Lands west of SR 103 | |
| ☐ Grayland-Westport: Lands west of SR 105 ☐ Ocean Shores-Copalis: Lands west of SR 115 and SR 109 | |
| \Box Ocean Shores-copans. Lands west of SK 113 and SK 109 \Box Yes $-$ Go to SC 6.1 \boxtimes No $=$ not an interdunal wetland for rating | Cat. II |
| 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)? \square Yes = Category I \square No – Go to SC 6.2 | Co. 111 |
| SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? | Cat. III |
| □Yes = Category II □No – Go to SC 6.3 | |
| 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? | Cat. IV |
| □Yes = Category III □No = Category IV | |
| | |
| Category of wetland based on Special Characteristics | |
| If you answered No for all types, enter "Not Applicable" on Summary Form | NA |

Wetland name or number: Click here to enter text.

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RATING SUMMARY – Western Washington

Name of wetland (or ID #): \overline{TT} Date of site visit: $\underline{2/19/2021}$ Rated by: $\underline{Sam Payne and Roen Hohlfeld}$ Trained by Ecology? $\boxtimes Y \square N$ Date of training: $\underline{9/2017}$ **HGM Class used for rating:** $\underline{Depressional}$ Wetland has multiple HGM classes? $\square Y \boxtimes N$

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

OVERALL WETLAND CATEGORY (based on functions ⊠ or special characteristics □)

1. Category of wetland based on FUNCTIONS

□ Category I – Total score = 23 - 27
 □ Category II – Total score = 20 - 22
 □ Category III – Total score = 16 - 19

☐ Category IV – Total score = 9 - 15

| FUNCTION | | nprov ter Q | ing uality | Hy | ydrolo | ogic | Habitat | | | |
|------------------------|----------|----------------|---------------|----------|--------|----------|---------|---------|----------|-------|
| | | | | | Circle | the ap | propr | iate ra | tings | |
| Site Potential | Н | M | L | Н | М | <u>L</u> | Н | М | <u>L</u> | |
| Landscape Potential | Н | М | <u>L</u> | Н | М | <u>L</u> | Н | M | L | |
| Value | <u>H</u> | М | L | <u>H</u> | М | L | Н | M | L | TOTAL |
| Score Based on Ratings | | 6 | | | 5 | | | 5 | | 16 |

Score for each function based on three ratings (order of ratings is not *important)* 9 = H,H,H8 = H,H,M7 = H,H,L7 = H,M,M6 = H,M,L6 = M,M,M5 = H,L,L5 = M,M,L4 = 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 | | \boxtimes | |

Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

| Map of: | To answer questions: | Figure # |
|---|----------------------|----------|
| Cowardin plant classes | D 1.3, H 1.1, H 1.4 | 1 |
| Hydroperiods | D 1.4, H 1.2 | 2 |
| Location of outlet (can be added to map of hydroperiods) | D 1.1, D 4.1 | 2 |
| Boundary of area within 150 ft of the wetland (can be added to another figure) | D 2.2, D 5.2 | 2 |
| Map of the contributing basin | D 4.3, D 5.3 | 3 |
| 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 | 4 |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website) | D 3.1, D 3.2 | 5 |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web) | D 3.3 | 6 |

HGM Classification of Wetlands in Western Washington

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?

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

| | ⊠NO – go to 2 | \square YES – the wetland class is Tidal Fringe – go to 1.1 |
|----|--|--|
| 1 | 1.1 Is the salinity of the wa | er during periods of annual low flow below 0.5 ppt (parts per thousand)? |
| | | assified as a Freshwater Tidal Fringe use the forms for Riverine wetlands. If it is an Estuarine wetland and is not scored. This method cannot be used to |
| 2. | | flat and precipitation is the only source (>90%) of water to it. Groundwate re NOT sources of water to the unit. |
| | \boxtimes NO – go to 3 If your wetland can be clo | \Box YES – The wetland class is Flats sified as a Flats wetland, use the form for Depressional wetlands. |
| 3. | ☐The vegetated part of to plants on the surface a | nit meet all of the following criteria? e wetland is on the shores of a body of permanent open water (without angany time of the year) at least 20 ac (8 ha) in size; a water area is deeper than 6.6 ft (2 m). |
| | ⊠ NO – go to 4 | ☐ YES – The wetland class is Lake Fringe (Lacustrine Fringe) |
| 4. | ☑The wetland is on a slo☑The water flows throuseeps. It may flow sul | nit meet all of the following criteria? e (slope can be very gradual), the wetland in one direction (unidirectional) and usually comes from turface, as sheetflow, or in a swale without distinct banks, without being impounded. |
| | ⊠N0 – go to 5 | \square YES – The wetland class is Slope |
| | | not pond in these type of wetlands except occasionally in very small and hind hummocks (depressions are usually <3 ft diameter and less than 1 ft |
| 5. | | nit meet all of the following criteria? stream channel, where it gets inundated by overbank flooding from that |

☐ The overbank flooding occurs at least once every 2 years.

| Wetland | name | or | number: | TT |
|---------|------|----|---------|----|
| | | | | |

| | NO − go to 6NOTE: The Riverine unit can contain depressions flooding | ☐ YES – The wetland class is Riverine s that are filled with water when the river is not |
|----|--|--|
| 6. | Is the entire wetland unit in a topographic depressurface, at some time during the year? <i>This mean of the wetland.</i> | ssion in which water ponds, or is saturated to the as that any outlet, if present, is higher than the interior |
| | \square NO – go to 7 | ⊠YES – The wetland class is Depressional |
| 7. | Is the entire wetland unit located in a very flat are flooding? The unit does not pond surface water r maintained by high groundwater in the area. The outlet. | <u>-</u> |
| | □ NO – go to 8 | \square 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 | HGM class to |
|---------------------------------------|---------------|
| being rated | use in rating |
| Slope + Riverine | Riverine |
| Slope + Depressional | Depressional |
| Slope + Lake Fringe | Lake Fringe |
| Depressional + Riverine along stream | Depressional |
| within boundary of depression | |
| Depressional + Lake Fringe | Depressional |
| Riverine + Lake Fringe | Riverine |
| Salt Water Tidal Fringe and any other | Treat as |
| class of freshwater wetland | 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.

| <u>DEPRESSIONAL AND FLATS WETLANDS</u> Water Quality Functions - Indicators that the site functions to improve water of | 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 ☐ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing of ☐ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. | points = 3 putlet. points = 2 points = 1 points = 1 | 3 |
| □ Wetland has persistent, ungrazed, plants > 1/2 of area □ Wetland has persistent, ungrazed plants > 1/10 of area | classes): points = 5 points = 3 points = 1 points = 0 | 5 |
| ☐ Area seasonally ponded is > ¼ total area of wetland | points = 4 points = 2 points = 0 | 0 |
| Total for D 1 Add the points in the boxes | s above | 8 |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 0-5 = L Record the ra | nting on the first | t 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? \Box Yes = 1 | ⊠ No = 0 | 0 |
| D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? \Box Yes = 1 | ⊠ No = 0 | 0 |
| D 2.3. Are there septic systems within 250 ft of the wetland? \Box 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: | ⊠ No = 0 | 0 |
| Total for D 2 Add the points in the boxes | s above | 0 |
| Rating of Landscape Potential If score is: $\square 3$ or $4 = H$ $\square 1$ or $2 = M$ $\boxtimes 0 = L$ Record the ratio | ing on the first p | 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? | ⊠ 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? \Box 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)? | □ No = 0 | 2 |
| Total for D 3 Add the points in the boxes | s above | 2 |
| Rating of Value If score is: $\boxtimes 2-4 = H \square 1 = M \square 0 = L$ Record the ra | ating on the first | page |

| DEPRESSIONAL AND FLATS WETLANDS | |
|--|------------|
| Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation | on |
| 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). ☐ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. ☐ D 4.1. Characteristics of surface water outlet (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ D 4.1. Characteristics of surface water leaving it (no outlet). ☐ | 4 |
| D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part. □ Marks of ponding are 3 ft or more above the surface or bottom of outlet. □ Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet. □ Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet. □ The wetland is a "headwater" wetland. □ Wetland is flat but has small depressions on the surface that trap water. □ Marks of ponding less than 0.5 ft (6 in). | 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. □ The area of the basin is 10 to 100 times the area of the unit. □ The area of the basin is more than 100 times the area of the unit. □ Entire wetland is in the Flats class. | 0 |
| Total for D 4 Add the points in the boxes above | 4 |
| Rating of Site Potential If score is: \Box 12-16 = H \Box 6-11 = M \boxtimes 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? \square Yes = 1 \square No = 0 | 0 |
| D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? \square Yes = 1 \square No = 0 | 0 |
| D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? \square Yes = 1 \square No = 0 | 0 |
| Total for D 5 Add the points in the boxes above | 0 |
| Rating of Landscape Potential If score is: $\Box 3 = H$ $\Box 1$ or $2 = M$ $\boxtimes 0 = L$ 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 ■ □ 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. | 2 |
| D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? | 0 |
| | _ |
| | 2 |

| 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 | 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 Freshwater tidal wetland 2 points | 0 |
| H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle If you counted: | 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 All three diagrams in this row are □ HIGH = 3points | 0 |

| 114 C. Crasial habitat factories | | |
|---|--------------------------------|----------------|
| 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. | |
| \square Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long). | | |
| \square Standing snags (dbh > 4 in) within the wetland. | | |
| ☐ Undercut banks are present for at least 6.6 ft (2 m) AND/OR overhanging plants ext | ends 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 d | | 1 |
| slope) OR signs of recent beaver activity are present (cut shrubs or trees that have | | |
| where wood is exposed). | e not yet meannered | |
| ☐ At least ¼ ac of thin-stemmed persistent plants or woody branches are present in a | reas that are | |
| permanently or seasonally inundated (structures for egg-laying by amphibians). | icas tilat arc | |
| | soo II 1 1 for list of | |
| ☑ Invasive plants cover less than 25% of the wetland area in every stratum of plants (s | see n 1.1 jor list oj | |
| strata). | | |
| | pints in the boxes above | 2 |
| Rating of Site Potential If score is: \Box 15-18 = H \Box 7-14 = M \boxtimes 0-6 = L | Record the rating on t | 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 + [(%moderate and low intensity land uses)/2] = 7.59 | % + (0.5%/2) = 7.75% | |
| If total accessible habitat is: | ` , , | |
| | naints - 2 | _ |
| ☐ > 1/3 (33.3%) of 1 km Polygon | points = 3 | 0 |
| 20-33% of 1 km Polygon | points = 2 | |
| ☐ 10-19% of 1 km Polygon | points = 1 | |
| | points = 0 | |
| H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. | | |
| Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2 = 86% + | - (11%/2) = 91.5% | |
| ☐ Undisturbed habitat > 50% of Polygon | points = 3 | |
| ☐ Undisturbed habitat 10-50% and in 1-3 patches | points = 2 | 3 |
| ☐ Undisturbed habitat 10-50% and > 3 patches | • | |
| · | points = 1 | |
| ☐ Undisturbed habitat < 10% of 1 km Polygon | points = 0 | |
| H 2.3. Land use intensity in 1 km Polygon: If | | |
| $\square >$ 50% of 1 km Polygon is high intensity land use | points = (- 2) | 0 |
| ≤ 50% of 1 km Polygon is high intensity | points = 0 | |
| Total for H 2 Add the po | oints in the boxes above | 3 |
| Rating of Landscape Potential If score is: □4-6 = H ⊠1-3 = M □<1 = L | Record the rating on th | ne 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? <i>Choose</i> | only the highest score | |
| that applies to the wetland being rated. | , 5 | |
| Site meets ANY of the following criteria: | points = 2 | |
| ☐ It has 3 or more priority habitats within 100 m (see next page) | r | |
| ☐ It provides habitat for Threatened or Endangered species (any plant or animal of | on the state or federal lists) | |
| ☐ It is mapped as a location for an individual WDFW priority species | the state of federal lists) | 1 |
| ☐ It is mapped as a location for an individual work priority species ☐ It is a Wetland of High Conservation Value as determined by the Department of | Natural Resources | 1 |
| ☐ It is a wetland of high conservation value as determined by the Department of ☐ It has been categorized as an important habitat site in a local or regional compr | | |
| | enensive pian, | |
| in a Shoreline Master Plan, or in a watershed plan | nainta = 1 | |
| ☑ Site has 1 or 2 priority habitats (listed on next page) within 100 m☐ Site does not meet any of the criteria above | points = 1 points = 0 | |
| LE NITE ONES NOT MEET ANY OT THE CRITERIA ANOVE | noints = 0 | |

Rating of Value If score is: $\Box 2 = H \boxtimes 1 = M \Box 0 = L$

Record the rating on the first page

WDFW Priority Habitats

<u>Priority habitats listed by WDFW</u> (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.

| \square 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 (<i>full descriptions in WDFW PHS report</i>). |
| \square 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 (<i>full descriptions in WDFW PHS report p. 158 – see web link above</i>). |
| \square 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 (<i>full descriptions in WDFW PHS report p. 161 – see web link above</i>). |
| ☐ 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). |
| \Box 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. |
| \Box Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation. |
| \Box 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.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

| Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met. | |
|---|---------|
| SC 1.0. Estuarine wetlands | |
| Does the wetland meet the following criteria for Estuarine wetlands? | |
| ☐ The dominant water regime is tidal, | |
| ☐ Vegetated, and | |
| ☐ With a salinity greater than 0.5 ppt ☐ Yes —Go to SC 1.1 ☒ No= Not an estuarine wetland | |
| 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? | Cat. I |
| \square Yes = Category I \square No - Go to SC 1.2 | |
| SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? | |
| | Cat. I |
| 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. | Cat. II |
| \square The wetland has at least two of the following features: tidal channels, depressions with open water, | |
| or contiguous freshwater wetlands. \square Yes = Category I \square No= Category 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? Solution Solution | |
| SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? | |
| http://www.dnr.wa.gov/NHPwetlandviewer □Yes = Category I □No = Not a WHCV | |
| SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? | Cat. I |
| http://file.dnr.wa.gov/publications/amp_nh_wetlands_trs.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? | |
| SC 3.0. Bogs | |
| Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key</i> | |
| 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? \Box Yes – Go to SC 3.3 \boxtimes 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? $\square Yes - Go to SC 3.3 \square No = Is not a bog$ | |
| , , , , , , , , , , , , , , , , , , , | Cat. I |
| cover of plant species listed in Table 4? \Box Yes = Is a Category I bog \Box 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? | |
| species (or combination of species) listed in Table 4 provide more than 50% of the cover under the carbopy: $\Box \text{Yes} = \text{Is a Category I bog} \qquad \Box \text{No} = \text{Is not a}$ | |

| 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? <i>If you answer YES you will still need to rate the wetland based on its functions.</i> 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 | | | |
| SC 5.0. Wetlands in Coastal Lagoons | | | |
| Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? | | | |
| \Box 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 | Cat. I | | |
| bottom) | . | | |
| ☐ 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? | | | |
| \square The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has | Cat. II | | |
| less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). | | | |
| \Box At least $\frac{3}{4}$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | | | |
| un- mowed grassland. \Box 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: | Cat I | | |
| ☐ Long Beach Peninsula: Lands west of SR 103 | | | |
| ☐ Grayland-Westport: Lands west of SR 105 | | | |
| \square Ocean Shores-Copalis: Lands west of SR 115 and SR 109 | Cat. II | | |
| \square Yes – Go to SC 6.1 \square No = not an interdunal wetland for rating | Cat. II | | |
| 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)? \Box Yes = Category I \Box No – Go to SC 6.2 | Cat. III | | |
| 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 | | | |
| 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 | | |
| □ 1es - Category III □ INO - Category IV | | | |
| | | | |
| Category of wetland based on Special Characteristics | NΙΛ | | |
| If you answered No for all types, enter "Not Applicable" on Summary Form | NA | | |

Wetland name or number: Click here to enter text.

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RATING SUMMARY – Western Washington

Name of wetland (or ID #): UU Date of site visit: 2/19/2021

Rated by: Sam Payne and Roen Hohlfeld Trained by Ecology? ⊠Y □N Date of training: 9/2017

HGM Class used for rating: Slope 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: Google Earth

OVERALL WETLAND CATEGORY (based on functions \boxtimes or special characteristics \square)

1. Category of wetland based on FUNCTIONS

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

| FUNCTION | Improving Water Quality | | Hydrologic | | Habitat | | | | | |
|--------------------------------|-------------------------|---|------------|----------|---------|---|---|---|----------|-------|
| Circle the appropriate ratings | | | | | | | | | | |
| Site Potential | Н | M | L | Н | M | L | Н | М | <u>L</u> | |
| Landscape Potential | Н | М | <u>L</u> | Н | M | L | Н | M | L | |
| Value | <u>H</u> | М | L | <u>H</u> | М | L | Н | M | L | TOTAL |
| Score Based on Ratings | | 6 | | | 7 | | | 5 | | 18 |

Score for each function based on three ratings (order of ratings is not important) 9 = H,H,H 8 = H H M

- 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 | \boxtimes | | |

Maps and figures required to answer questions correctly for Western Washington

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 | S 4.1 | |
| (can be added to figure above) | | |
| 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 | H 2.1, H 2.2, H 2.3 | |
| polygons for accessible habitat and undisturbed habitat | | |
| 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 | |

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 en | tire unit usually controlled by tides except during floods | ? |
|----|--|---|----------------------------|
| | ⊠N0 - go to 2 | \square YES – the wetland class is Tidal Fringe – | go to 1.1 |
| 1 | 1.1 Is the salinity of the water d | uring periods of annual low flow below 0.5 ppt (parts p | er thousand)? |
| | | fied as a Freshwater Tidal Fringe use the forms for River s an Estuarine wetland and is not scored. This method ca | ine wetlands. If it |
| 2. | | and precipitation is the only source (>90%) of water to NOT sources of water to the unit. | it. Groundwater |
| | \boxtimes NO – go to 3 If your wetland can be classified | $\square YES$ – The wetland clased as a Flats wetland, use the form for Depressional wetl | |
| 3. | ☐ The vegetated part of the we plants on the surface at any | neet all of the following criteria? The tetland is on the shores of a body of permanent open was time of the year) at least 20 ac (8 ha) in size; That are are a is deeper than 6.6 ft (2 m). | ter (without any |
| | ⊠ NO – go to 4 | \square YES – The wetland class is Lake Fringe (Lacustrine | e Fringe) |
| 4. | ☑ The wetland is on a slope (☑ The water flows through the seeps. It may flow subsure | neet all of the following criteria? Slope can be very gradual), e wetland in one direction (unidirectional) and usually of ace, as sheetflow, or in a swale without distinct banks, and without being impounded. | comes from |
| | \square NO – go to 5 | ▼YES - The wetland class | is Slope |
| | | t pond in these type of wetlands except occasionally in d hummocks (depressions are usually <3 ft diameter a | _ |
| 5. | ☐ The unit is in a valley, or st stream or river, | neet all of the following criteria? ream channel, where it gets inundated by overbank floo urs at least once every 2 years. | ding from that |
| | | | |

| | □NO – go to 6 NOTE : The Riverine unit can contain depression flooding | \square YES – The wetland class is Riverine as that are filled with water when the river is not |
|----|---|---|
| 6. | 1 0 1 | ession in which water ponds, or is saturated to the ans that any outlet, if present, is higher than the interior |
| | □ NO – go to 7 | \square YES – The wetland class is Depressional |
| 7. | flooding? The unit does not pond surface water | rea with no obvious depression and no overbank more than a few inches. The unit seems to be ne wetland may be ditched, but has no obvious natural |
| | □ NO – go to 8 | \square 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 | HGM class to |
|---------------------------------------|---------------|
| being rated | use in rating |
| Slope + Riverine | Riverine |
| Slope + Depressional | Depressional |
| Slope + Lake Fringe | Lake Fringe |
| Depressional + Riverine along stream | Depressional |
| within boundary of depression | |
| Depressional + Lake Fringe | Depressional |
| Riverine + Lake Fringe | Riverine |
| Salt Water Tidal Fringe and any other | Treat as |
| class of freshwater wetland | 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: UU

| CLODE WETLANDS | |
|---|---------------|
| SLOPE WETLANDS | |
| Water Quality Functions - Indicators that the site functions to improve water quality | |
| S 1.0. Does the site have the potential to improve water quality? | |
| S 1.1. Characteristics of the average slope of the wetland: (a 1% slope has a 1 ft vertical drop in elevation for every | |
| 100 ft of horizontal distance) | |
| ☐ Slope is 1% or less points = 3 | 0 |
| ☐ Slope is > 1%-2% points = 2 | - |
| ☐ Slope is > 2%-5% points = 1 | |
| | |
| S 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions): Yes = $3 \square No = 0 \square$ | 0 |
| S 1.3. Characteristics of the plants in the wetland that trap sediments and pollutants: | |
| Choose the points appropriate for the description that best fits the plants in the wetland. Dense means you | |
| have trouble seeing the soil surface (>75% cover), and uncut means not grazed or mowed and plants are higher | |
| than 6 in. | |
| ☐ Dense, uncut, herbaceous plants > 90% of the wetland area points = 6 | 6 |
| ☐ Dense, uncut, herbaceous plants > ½ of area points = 3 | |
| ☐ Dense, woody, plants > ½ of area points = 2 | |
| ☐ Dense, uncut, herbaceous plants > ¼ of area points = 1 | |
| ☐ Does not meet any of the criteria above for plants points = 0 | |
| Total for S 1 Add the points in the boxes above | 6 |
| Rating of Site Potential If score is: \Box 12 = H \boxtimes 6-11 = M \Box 0-5 = L Record the rating on the same of the sa | he first page |
| S 2.0. Does the landscape have the potential to support the water quality function of the site? | |
| S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in land uses that generate pollutants? | • |
| . □Yes = 1 ⊠ No = 0 | 0 |
| S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? | _ |
| Other sources \Box Yes = 1 \boxtimes No = 0 | 0 |
| Total for S 2 Add the points in the boxes above | 0 |
| Rating of Landscape Potential If score is: \Box 1-2 = M \boxtimes 0 = L Record the rating on t | he first page |
| | · · · |
| S 3.0. Is the water quality improvement provided by the site valuable to society? | |
| S 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the | 0 |
| 303(d) list? □ Yes = 1 ⊠ No = 0 | 0 |
| S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? At least one aquatic resource in the basin is | 0 |
| on the 303(d) list. \square Yes = 1 \square No = 0 | J |
| S 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? <i>Answer YES</i> | 2 |
| if there is a TMDL for the basin in which unit is found. $	extstyle 	extsty$ | ۷ |
| Total for S 3 Add the points in the boxes above | 2 |
| Rating of Value If score is: $\square 2-4 = H \square 1 = M \square 0 = L$ Record the rating on t | he first page |

| SLOPE WETLANDS Hydrologic Functions - Indicators that the site functions to reduce flooding and stream erosis | ion |
|---|----------------|
| S 4.0. Does the site have the potential to reduce flooding and stream erosion? | |
| S 4.1. Characteristics of plants that reduce the velocity of surface flows during storms: Choose the points appropriate for the description that best fits conditions in the wetland. Stems of plants should be thick enough (usually >1/8 ₈ in), or dense enough, to remain erect during surface flows. □ Dense, uncut, rigid plants cover > 90% of the area of the wetland points = 1 □ All other conditions points = 0 | 1 |
| Rating of Site Potential If score is: $\square 1 = M \square 0 = L$ Record the rating on a | the first page |
| S 5.0. Does the landscape have the potential to support the hydrologic functions of the site? | |
| S 5.1. Is more than 25% of the area within 150 ft upslope of wetland in land uses or cover that generate excess surface runoff? \boxtimes Yes = 1 \square No = 0 | 1 |
| Rating of Landscape Potential If score is: $\square 1 = M$ $\square 0 = L$ Record the rating on the score is: | the first page |
| S 6.0. Are the hydrologic functions provided by the site valuable to society? | |
| S 6.1. Distance to the nearest areas downstream that have flooding problems: □ The sub-basin immediately down-gradient of site has flooding problems that result in damage to human or natural resources (e.g., houses or salmon redds) □ Surface flooding problems are in a sub-basin farther down-gradient □ No flooding problems anywhere downstream □ Points = 0 | 2 |
| S 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? \Box Yes = 2 \boxtimes No = 0 | 0 |
| Total for S 6 Add the points in the boxes above | 2 |
| Rating of Value If score is: $\boxtimes 2-4 = H$ $\square 1 = M$ $\square 0 = I$ | the first nage |

NOTES and FIELD OBSERVATIONS:

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 3 structures: points = 2 0 ☐ 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 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 1 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 H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle 1 If you counted: \square > 19 species points = 2points = 1 \Box < 5 species points = 0 H 1.4. Interspersion of habitats Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. If you have four or more plant classes or three classes and open water, the rating is always high. 0 None = 0 points \square Low = 1 point ☐ **Moderate** = 2 points All three diagrams in this row are \square **HIGH** = 3points

| Wetland name or number: UU | |
|---|----------------|
| 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. | |
| \square Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long). | |
| \square 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). | |
| \square Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree | 1 |
| slope) OR signs of recent beaver activity are present (cut shrubs or trees that have not yet weathered | |
| where wood is exposed). | |
| \square 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). | |
| oxtimes Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of | |
| strata). | |
| Total for H 1 Add the points in the boxes above | 3 |
| Rating of Site Potential If score is: \Box 15-18 = H \Box 7-14 = M \boxtimes 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 + [(%moderate and low intensity land uses)/2] = 7.5% + (0.5%/2) = 7.75% | |
| If total accessible habitat is: | |
| $\square > 1/3$ (33.3%) of 1 km Polygon points = 3 | 0 |
| \square 20-33% of 1 km Polygon points = 2 | |
| \square 10-19% of 1 km Polygon points = 1 | |
| \boxtimes < 10% of 1 km Polygon points = 0 | |
| H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. | |
| Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2 = 86% + (11%/2) = 91.5% | |
| ✓ Undisturbed habitat > 50% of Polygon points = 3 | |
| ☐ Undisturbed habitat 10-50% and in 1-3 patches points = 2 | 3 |
| | |
| ☐ Undisturbed habitat 10-50% and > 3 patches points = 1 | |
| ☐ Undisturbed habitat < 10% of 1 km Polygon points = 0 | |
| H 2.3. Land use intensity in 1 km Polygon: If | _ |
| □ > 50% of 1 km Polygon is high intensity land use points = (-2) | 0 |
| | |
| Total for H 2 Add the points in the boxes above | 3 |
| Rating of Landscape Potential If score is: \Box 4-6 = H \boxtimes 1-3 = M \Box < 1 = L Record the rating on the | ie 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 | |
| \square It has 3 or more priority habitats within 100 m (see next page) | |
| \square It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists) | |
| \square It is mapped as a location for an individual WDFW priority species | 1 |
| ☐ 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 | |
| nonts = 1 | 4 |

Rating of Value If score is: $\Box 2 = H \boxtimes 1 = M \Box 0 = L$

Record the rating on the first page

points = 0

 $\hfill \square$ Site does not meet any of the criteria above

WDFW Priority Habitats

<u>Priority habitats listed by WDFW</u> (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.

| \square 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 (<i>full descriptions in WDFW PHS report</i>). |
| \square 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 (<i>full descriptions in WDFW PHS report p. 158 – see web link above</i>). |
| \square 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 (<i>full descriptions in WDFW PHS report p. 161 – see web link above</i>). |
| ☐ 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). |
| \Box 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. |
| \Box Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation. |
| \Box Talus: Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, and or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs. |
| \boxtimes 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.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

| Wetland Type | Category |
|--|----------|
| Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met. | |
| SC 1.0. Estuarine wetlands | |
| Does the wetland meet the following criteria for Estuarine wetlands? | |
| \square The dominant water regime is tidal, | |
| \square Vegetated, and | |
| ☐ With a salinity greater than 0.5 ppt ☐ Yes —Go to SC 1.1 ☐ No= Not an estuarine wetland | |
| 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? | Cat. I |
| ☐Yes = Category I ☐ No - Go to SC 1.2 | , |
| SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? | |
| \Box The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has | Cat. I |
| less than 10% cover of non-native plant species. (If non-native species are Spartina, see page 25) | |
| \square At least $rac{3}{4}$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | |
| un- mowed grassland. | Cat. II |
| \square The wetland has at least two of the following features: tidal channels, depressions with open water, | |
| or contiguous freshwater wetlands. \square Yes = Category I \square No= Category 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? | |
| SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? | |
| http://www.dnr.wa.gov/NHPwetlandviewer □Yes = Category I ☑No = Not a WHCV | |
| SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? | Cat. I |
| http://file.dnr.wa.gov/publications/amp_nh_wetlands_trs.pdf | |
| \Box Yes – Contact WNHP/WDNR and go to SC 2.4 \Box 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? \Box Yes = Category I \Box No = Not a WHCV | |
| 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? \Box Yes – Go to SC 3.3 \Box 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? \Box Yes – Go to SC 3.3 \boxtimes No = Is not a bog | 6-4-1 |
| 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% | Cat. I |
| cover of plant species listed in Table 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 \text{No = Is not a bog} | |

| 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? <i>If you answer YES you will still need to rate the wetland based on its functions.</i> □ 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). | Cat. I |
| ☐Yes = Category I ☐No = Not a forested wetland for this section | |
| 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) ☐ 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). ☐ At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. ☐ The wetland is larger than ¹/₁₀ ac (4350 ft²) | Cat. I Cat. II |
| □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 | Cat. II |
| 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)? SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? | Cat. III |
| Yes = Category II □ No − Go to SC 6.3 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 | NA |

Wetland name or number: <u>A</u>

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RATING SUMMARY – Western Washington

Name of wetland (or ID #): VV Date of site visit: 2/19/2021

Rated by: Sam Payne and Roen Hohlfeld Trained by Ecology? \boxtimes Y \square N Date of training: 9/2017

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: Google Earth, Pierce County

OVERALL WETLAND CATEGORY (based on functions ⊠ or special characteristics □)

1. Category of wetland based on FUNCTIONS

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

| FUNCTION | | nprov ter Q | ing uality | Н | ydrolo | gic | | Habita | at | |
|------------------------|----------|----------------|---------------|---|--------|----------|----------|---------|-------|-------|
| | | | | | Circle | the ap | propri | iate ra | tings | |
| Site Potential | <u>H</u> | М | L | Н | M | L | Н | M | L | |
| Landscape Potential | Н | М | <u>L</u> | Н | М | <u>L</u> | <u>H</u> | М | L | |
| Value | <u>H</u> | М | L | Н | М | L | Н | M | L | TOTAL |
| Score Based on Ratings | | 7 | | | 6 | | | 7 | | 20 |

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

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

2. Category based on SPECIAL CHARACTERISTICS of wetland

| CHARACTERISTIC | CATEGORY | | |
|------------------------------------|----------|-------------|--|
| Estuarine | 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 | | \boxtimes | |

Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

| Map of: | To answer questions: | Figure # |
|---|----------------------|----------|
| Cowardin plant classes | D 1.3, H 1.1, H 1.4 | 1 |
| Hydroperiods | D 1.4, H 1.2 | 2 |
| Location of outlet (can be added to map of hydroperiods) | D 1.1, D 4.1 | 2 |
| Boundary of area within 150 ft of the wetland (can be added to another figure) | D 2.2, D 5.2 | 2 |
| Map of the contributing basin | D 4.3, D 5.3 | 3 |
| 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 | 4 |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website) | D 3.1, D 3.2 | 5 |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web) | D 3.3 | 6 |

HGM Classification of Wetlands in Western Washington

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you

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

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?

□ 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)

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.

| | | YES – Freshwater Tidal Fringe ater Tidal Fringe use the forms for Riverine wetlands. If it yetland and is not scored. This method cannot be used to |
|----|---|--|
| 2. | The entire wetland unit is flat and precipitation and surface water runoff are NOT sources of vertical surfaces. | on is the only source (>90%) of water to it. Groundwater water to the unit. |
| | \boxtimes NO – go to 3 If your wetland can be classified as a Flats wetl | \Box YES – The wetland class is Flats land, use the form for Depressional wetlands. |
| 3. | Does the entire wetland unit meet all of the formula to the vegetated part of the wetland is on the plants on the surface at any time of the year □ At least 30% of the open water area is deep | shores of a body of permanent open water (without any r) at least 20 ac (8 ha) in size; |
| | \boxtimes NO – go to 4 \square YES – The v | vetland class is Lake Fringe (Lacustrine Fringe) |
| 4. | Does the entire wetland unit meet all of the fe ⊠ The wetland is on a slope (<i>slope can be very</i> . ⊠ The water flows through the wetland in one seeps. It may flow subsurface, as sheetflow ⊠ The water leaves the wetland without bein | orgradual), e direction (unidirectional) and usually comes from organizers, or in a swale without distinct banks, |
| | ⊠NO – go to 5 | \square YES – The wetland class is Slope |
| | | type of wetlands except occasionally in very small and epressions are usually <3 ft diameter and less than 1 ft |
| 5. | Does the entire wetland unit meet all of the formula is in a valley, or stream channel, we stream or river, ☐ The overbank flooding occurs at least once | here it gets inundated by overbank flooding from that |

Wetland Rating System for Western WA: 2014 Update Rating Form – Effective January 1, 2015

| Wetland n | ame or n | umber: \ | /V |
|-----------|----------|----------|----|
|-----------|----------|----------|----|

| | NO – go to 6NOTE: The Riverine unit can contain depressions flooding | ☐ YES – The wetland class is Riverine that are filled with water when the river is not |
|----|--|---|
| 6. | Is the entire wetland unit in a topographic depressurface, at some time during the year? <i>This mean of the wetland.</i> | sion in which water ponds, or is saturated to the as that any outlet, if present, is higher than the interior |
| | \square NO – go to 7 | $oxtimes \mathbf{YES}$ – The wetland class is Depressional |
| 7. | Is the entire wetland unit located in a very flat are flooding? The unit does not pond surface water maintained by high groundwater in the area. The outlet. | • |
| | □ NO – go to 8 | \square 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 | HGM class to |
|---------------------------------------|---------------|
| being rated | use in rating |
| Slope + Riverine | Riverine |
| Slope + Depressional | Depressional |
| Slope + Lake Fringe | Lake Fringe |
| Depressional + Riverine along stream | Depressional |
| within boundary of depression | |
| Depressional + Lake Fringe | Depressional |
| Riverine + Lake Fringe | Riverine |
| Salt Water Tidal Fringe and any other | Treat as |
| class of freshwater wetland | 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.

| DEPRESSIONAL AND FLATS WETLANDS | | | | | |
|--|------------------|-----------|--|--|--|
| Water Quality Functions - Indicators that the site functions to improve wate | r 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: | | | | | |
| oxtimes Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (r | | | | | |
| \square Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing | points = 3 | _ | | | |
| wettand has an intermittently nowing stream of ditch, OK nightly constricted permanently nowing | points = 2 | 3 | | | |
| \Box Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. | points = 1 | | | | |
| $\ \square$ 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 Coward | | | | | |
| ☑ Wetland has persistent, ungrazed, plants > 95% of area | points = 5 | | | | |
| ☐ Wetland has persistent, ungrazed, plants > 1/2 of area | points = 3 | 5 | | | |
| \square Wetland has persistent, ungrazed plants > 1/10 of area | points = 1 | | | | |
| \square 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 | 4 | | | |
| ☐ Area seasonally ponded is > ¼ total area of wetland | points = 2 | | | | |
| ☐ Area seasonally ponded is < ¼ total area of wetland | points = 0 | | | | |
| Total for D 1 Add the points in the box | es above | 12 | | | |
| Rating of Site Potential If score is: \boxtimes 12-16 = H \square 6-11 = M \square 0-5 = L <i>Record the</i> | rating on the f | irst 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? | L ⊠ No = 0 | 0 | | | |
| D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? \Box Yes = 1 | L ⊠ No = 0 | 0 | | | |
| D 2.3. Are there septic systems within 250 ft of the wetland? \Box Yes = 2 | 1 ⊠ No = 0 | 0 | | | |
| D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in | | 0 | | | |
| · | L ⊠ No = 0 | | | | |
| Total for D 2 Add the points in the box | es above | 0 | | | |
| Rating of Landscape Potential If score is: $\Box 3$ or $4 = H$ $\Box 1$ or $2 = M$ $\boxtimes 0 = L$ Record the re- | ating on the fir | st 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 | | 0 | | | |
| water that is on the 303(d) list? \Box Yes = 1 | 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? \Box Yes = 2 | 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)? \square Yes = 2 | 2 □ No = 0 | 2 | | | |
| Total for D 3 Add the points in the box | es above | 2 | | | |
| Rating of Value If score is: $\square 2-4 = H \square 1 = M \square 0 = L$ Record the | rating on the f | rst page | | | |

| <u>DEPRESSIONAL AND FLATS WETLANDS</u> | |
|--|------------|
| Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradati | on |
| D 4.0. Does the site have the potential to reduce flooding and erosion? | |
| D 4.1. Characteristics of surface water outflows from the wetland: ☐ Wetland is a depression or flat depression with no surface water leaving it (no outlet). points = 4 ☐ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. points = 2 ☐ Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1 ☐ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. points = 0 | 4 |
| D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part. □ Marks of ponding are 3 ft or more above the surface or bottom of outlet. □ Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet. □ Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet. □ The wetland is a "headwater" wetland. □ Wetland is flat but has small depressions on the surface that trap water. □ Marks of ponding less than 0.5 ft (6 in). | 3 |
| 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. □ The area of the basin is 10 to 100 times the area of the unit. □ The area of the basin is more than 100 times the area of the unit. □ Entire wetland is in the Flats class. | 3 |
| Total for D 4 Add the points in the boxes above | 10 |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 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? \square Yes = 1 \square No = 0 | 0 |
| D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? \square Yes = 1 \square No = 0 | 0 |
| D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? \Box Yes = 1 \boxtimes No = 0 | 0 |
| Total for D 5 Add the points in the boxes above | 0 |
| Rating of Landscape Potential If score is: $\Box 3 = H \Box 1$ or $2 = M \boxtimes 0 = L$ 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 ■ □ 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. | 2 |
| D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? | 0 |
| | |
| Add the neight in the hover shows | 2 |

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 1 ☐ Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1 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 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 1 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 H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle 1 If you counted: \square > 19 species points = 2 points = 1 \Box < 5 species points = 0 H 1.4. Interspersion of habitats Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. If you have four or more plant classes or three classes and open water, the rating is always high. 0 **None** = 0 points ☐ **Moderate** = 2 points \square Low = 1 point All three diagrams in this row are ☐ **HIGH** = 3points

| H 1.5. Special habitat features: | | |
|---|--------------------------------|---------------|
| Check the habitat features that are present in the wetland. The number of checks is the | ne 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 e. | xtends 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 | | 4 |
| slope) OR signs of recent beaver activity are present (cut shrubs or trees that ha | | |
| where wood is exposed). | ive not yet weathered | |
| | areas that are | |
| permanently or seasonally inundated (structures for egg-laying by amphibians). | areas triat are | |
| | Isaa II 1 1 far list of | |
| ☑ Invasive plants cover less than 25% of the wetland area in every stratum of plants | (see H 1.1 for list of | |
| strata). | | _ |
| Total for H 1 Add the p | points in the boxes above | 7 |
| Rating of Site Potential If score is: \Box 15-18 = H \boxtimes 7-14 = M \Box 0-6 = L | Record the rating on t | he 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 + [(%moderate and low intensity land uses)/2] = 40 | .5% + (1%/2) = 41% | |
| If total accessible habitat is: | ` ' ' | |
| | points = 3 | 3 |
| | • | 3 |
| ☐ 20-33% of 1 km Polygon | points = 2 | |
| ☐ 10-19% of 1 km Polygon | points = 1 | |
| ☐ < 10% of 1 km Polygon | points = 0 | |
| H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. | | |
| Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2 = 90% | + (6.5%/2) = 93.25% | |
| ☑ Undisturbed habitat > 50% of Polygon | points = 3 | 2 |
| ☐ Undisturbed habitat 10-50% and in 1-3 patches | points = 2 | 3 |
| ☐ Undisturbed habitat 10-50% and > 3 patches | points = 1 | |
| ☐ Undisturbed habitat < 10% of 1 km Polygon | points = 0 | |
| H 2.3. Land use intensity in 1 km Polygon: If | pomes | |
| | nainta (2) | 0 |
| □ > 50% of 1 km Polygon is high intensity land use | points = (- 2) | 0 |
| | points = 0 | |
| | points in the boxes above | 6 |
| Rating of Landscape Potential If score is: $\square 4-6 = H \square 1-3 = M \square < 1 = L$ | Record the rating on th | e 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 | se only the highest score | |
| that applies to the wetland being rated. | , , | |
| Site meets ANY of the following criteria: | points = 2 | |
| \Box 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 | | 1 |
| ☐ It is a Wetland of High Conservation Value as determined by the Department of | of Natural Resources | _ |
| ☐ It has been categorized as an important habitat site in a local or regional comp | | |
| 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 | |
| · · | • | |

Rating of Value If score is: $\Box 2 = H \boxtimes 1 = M \Box 0 = L$

Record the rating on the first page

WDFW Priority Habitats

<u>Priority habitats listed by WDFW</u> (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.

| \square 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 (<i>full descriptions in WDFW PHS report</i>). |
| \square 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 (<i>full descriptions in WDFW PHS report p. 158 – see web link above</i>). |
| ☐ 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 (<i>full descriptions in WDFW PHS report p. 161 – see web link above</i>). |
| ☐ 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. (<i>full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page</i>). |
| □ 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. |
| \Box Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation. |
| \Box Talus: Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, and or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs. |
| \boxtimes 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.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

| Wetland Type | Category |
|--|----------|
| Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met. | |
| SC 1.0. Estuarine wetlands | |
| Does the wetland meet the following criteria for Estuarine wetlands? | |
| \square 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 | |
| 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? | Cat. I |
| \Box Yes = Category I \Box No - Go to SC 1.2 | Cut. 1 |
| | |
| SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? | Cat. I |
| ☐ The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has | Cat. i |
| less than 10% cover of non-native plant species. (If non-native species are <i>Spartina</i> , see page 25) | |
| \square At least $lpha$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | Cat. II |
| un- mowed grassland. | Cat. II |
| \square 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 | |
| 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? | |
| — | |
| SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? | |
| http://www.dnr.wa.gov/NHPwetlandviewer □Yes = Category I □No = Not a WHCV | Cat. I |
| SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? | |
| http://file.dnr.wa.gov/publications/amp_nh_wetlands_trs.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? | |
| <u> </u> | |
| 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? \Box Yes – Go to SC 3.3 \boxtimes 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? \Box Yes – Go to SC 3.3 \boxtimes 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% | Cat. I |
| 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 | |

| 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? <i>If you answer YES you will still need to rate the wetland based on its functions.</i> □ 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). | Cat. I |
| ☐Yes = Category I ☐No = Not a forested wetland for this section | |
| SC 5.0. Wetlands in Coastal Lagoons | |
| Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? | |
| \Box 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 | Cat. I |
| bottom) | . |
| ☐ 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? | |
| \square The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has | Cat. II |
| less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). | |
| \square At least $rac{3}{4}$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | |
| un-mowed grassland. \Box 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: | Cat I |
| ☐ Long Beach Peninsula: Lands west of SR 103 | |
| ☐ Grayland-Westport: Lands west of SR 105 | |
| \square Ocean Shores-Copalis: Lands west of SR 115 and SR 109 | Cat. II |
| \square Yes – Go to SC 6.1 \square No = not an interdunal wetland for rating | Cat. II |
| 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)? \Box Yes = Category I \Box No – Go to SC 6.2 | Cat. III |
| 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 | |
| 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 |
| Tes - Category III LINO - Category IV | |
| | |
| Category of wetland based on Special Characteristics | NI A |
| If you answered No for all types, enter "Not Applicable" on Summary Form | NA |

Wetland name or number: Click here to enter text.

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RATING SUMMARY – Western Washington

Name of wetland (or ID #): <u>WW</u> Date of site visit: <u>2/25/2021</u>

Rated by: Sam Payne and Roen Hohlfeld Trained by Ecology? $\boxtimes Y \square N$ Date of training: 9/2017

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: Google Earth, Pierce County

OVERALL WETLAND CATEGORY (based on functions ⊠ or special characteristics □)

1. Category of wetland based on FUNCTIONS

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

| FUNCTION | Improving Water Quality | | Hydrologic | | Habitat | | | | | |
|------------------------|-------------------------|---|------------|----------|----------|----------|-------|----------|-------|-------|
| | | | | | Circle t | the ap | propr | iate ra | tings | |
| Site Potential | Н | M | L | Н | M | L | Н | M | L | |
| Landscape Potential | Н | М | <u>L</u> | Н | М | <u>L</u> | Н | <u>M</u> | L | |
| Value | <u>H</u> | М | L | <u>H</u> | М | L | Н | M | L | TOTAL |
| Score Based on Ratings | | 6 | | | 6 | | | 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 I | | | |
| Old Growth Forest | | | | |
| Coastal Lagoon | I | II | | |
| Interdunal | I II | III IV | | |
| None of the above | | \boxtimes | | |

Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

| Map of: | To answer questions: | Figure # |
|---|----------------------|----------|
| Cowardin plant classes | D 1.3, H 1.1, H 1.4 | 1 |
| Hydroperiods | D 1.4, H 1.2 | 2 |
| Location of outlet (can be added to map of hydroperiods) | D 1.1, D 4.1 | 2 |
| Boundary of area within 150 ft of the wetland (can be added to another figure) | D 2.2, D 5.2 | 2 |
| Map of the contributing basin | D 4.3, D 5.3 | 3 |
| 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 | 4 |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website) | D 3.1, D 3.2 | 5 |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web) | D 3.3 | 6 |

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 e | ntire unit usually controlled | by tides except during floods? |
|----|--|---|---|
| | ⊠N0 - go to 2 | □ YES – the we | etland class is Tidal Fringe – go to 1.1 |
| 1 | 1.1 Is the salinity of the water | during periods of annual lo | w flow below 0.5 ppt (parts per thousand)? |
| | | sified as a Freshwater Tidal I is an Estuarine wetland and | YES - Freshwater Tidal Fringe Fringe use the forms for Riverine wetlands. If it d is not scored. This method cannot be used to |
| 2. | The entire wetland unit is fla and surface water runoff are | | nly source (>90%) of water to it. Groundwater e unit. |
| | ⊠NO – go to 3 If your wetland can be classif | fied as a Flats wetland, use th | \square YES – The wetland class is Flats are form for Depressional wetlands. |
| 3. | | wetland is on the shores of any time of the year) at least | a body of permanent open water (without any 20 ac (8 ha) in size; |
| | ⊠N0 – go to 4 | \square YES – The wetland cla | ss is Lake Fringe (Lacustrine Fringe) |
| 4. | _ | (slope can be very gradual), the wetland in one direction rface, as sheetflow, or in a sy | (unidirectional) and usually comes from wale without distinct banks, |
| | \boxtimes NO – go to 5 | | \square YES – The wetland class is Slope |
| | | - | etlands except occasionally in very small and s are usually <3 ft diameter and less than 1 ft |
| 5. | stream or river, | stream channel, where it get | s inundated by overbank flooding from that |
| | \square The overbank flooding occ | curs at least office every 2 ye | ai S. |

| | NO – go to 6NOTE: The Riverine unit can contain depression flooding | \square YES – The wetland class is Riverine ns that are filled with water when the river is not |
|----|--|--|
| 6. | | ression in which water ponds, or is saturated to the rans that any outlet, if present, is higher than the interior |
| | □ NO – go to 7 | $oxtimes \mathbf{YES}$ – The wetland class is Depressional |
| 7. | flooding? The unit does not pond surface water | area with no obvious depression and no overbank r more than a few inches. The unit seems to be he wetland may be ditched, but has no obvious natural |
| | □ NO – go to 8 | \square 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 | HGM class to |
|---------------------------------------|---------------|
| being rated | use in rating |
| Slope + Riverine | Riverine |
| Slope + Depressional | Depressional |
| Slope + Lake Fringe | Lake Fringe |
| Depressional + Riverine along stream | Depressional |
| within boundary of depression | |
| Depressional + Lake Fringe | Depressional |
| Riverine + Lake Fringe | Riverine |
| Salt Water Tidal Fringe and any other | Treat as |
| class of freshwater wetland | 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.

| <u>DEPRESSIONAL AND FLATS WETLANDS</u> 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? | er 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 (✓ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing ✓ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. ✓ Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. | points = 3 ng outlet. points = 2 | 3 | | | |
| D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions). ☐ Yes | s = 4 ⊠ No = 0 | 0 | | | |
| D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Coward Wetland has persistent, ungrazed, plants > 95% of area Wetland has persistent, ungrazed, plants > 1/2 of area Wetland has persistent, ungrazed plants > 1/10 of area Wetland has persistent, ungrazed plants < 1/10 of area | | 5 | | | |
| 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 □ Area seasonally ponded is > ½ total area of wetland □ Area seasonally ponded is < ½ total area of wetland | points = 4 points = 2 points = 0 | 0 | | | |
| Total for D 1 Add the points in the bo | xes above | 8 | | | |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 0-5 = L Record the | e rating on the f | ïrst 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? \Box Yes = | 1 ⊠ No = 0 | 0 | | | |
| | 1 ⊠ No = 0 | 0 | | | |
| | 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: | 1 ⊠ No = 0 | 0 | | | |
| Total for D 2 Add the points in the bo | xes above | 0 | | | |
| Rating of Landscape Potential If score is: $\square 3$ or $4 = H$ $\square 1$ or $2 = M$ $\boxtimes 0 = L$ Record the M | rating on the fin | st 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? | 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? \Box 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)? | 2 | 2 | | | |
| Total for D 3 Add the points in the bo | xes above | 2 | | | |
| Rating of Value If score is: $\square 2-4 = H \square 1 = M \square 0 = L$ Record the | rating on the f | irst page | | | |

| DEPRESSIONAL AND FLATS WETLANDS | |
|--|------------|
| Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradati | on |
| 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 | |
| \square Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently | 4 |
| flowing outlet. points = 2 | 4 |
| \square Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1 | |
| \square Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. points = 0 | |
| D 4.2. <u>Depth of storage during wet periods:</u> 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. | |
| \square Marks of ponding are 3 ft or more above the surface or bottom of outlet. points = 7 | |
| ☐ Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet. points = 5 | 0 |
| ☐ 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 | 7 |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 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? \square Yes = 1 \boxtimes No = 0 | 0 |
| D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? \square Yes = 1 \square No = 0 | 0 |
| D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at | 0 |
| >1 residence/ac, urban, commercial, agriculture, etc.)? \Box Yes = 1 \boxtimes No = 0 | |
| Total for D 5 Add the points in the boxes above | 0 |
| Rating of Landscape Potential If score is: $\Box 3 = H \Box 1$ or $2 = M \boxtimes 0 = L$ Record the rating on the | first page |
| D 6.0. Are the hydrologic functions provided by the site valuable to society? | |
| D 6.1. The unit is in a landscape that has flooding problems. Choose the description that best matches conditions around | |
| the wetland unit being rated. Do not add points. <u>Choose the highest score if more than one condition is met</u> . | |
| The wetland captures surface water that would otherwise flow down-gradient into areas where flooding has | |
| damaged human or natural resources (e.g., houses or salmon redds): | |
| ● ☑ Flooding occurs in a sub-basin that is immediately down-gradient of unit. points = 2 | |
| ● ☐ Surface flooding problems are in a sub-basin farther down-gradient. points = 1 | 2 |
| \square Flooding from groundwater is an issue in the sub-basin. points = 1 | |
| \square 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 | |
| | <u> </u> |
| ID 6.2. Has the site been identified as important for flood storage or flood convevance in a regional flood control plan? | |
| 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 |
| D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? ☐ Yes = 2 ☒ No = 0 Total for D 6 Add the points in the boxes above | 0 |

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

Record the rating on the first page

These questions apply to wetlands of all HGM classes. **HABITAT FUNCTIONS** - Indicators that site functions to provide important habitat H 1.0. Does the site have the potential to provide habitat? H 1.1. Structure of plant community: Indicators are Cowardin classes and strata within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked. ☐ Aquatic bed 4 structures or more: points = 4 ☐ Emergent 3 structures: points = 2 2 Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1 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 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 2 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 H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle 2 If you counted: ⋈ > 19 species points = 2 ☐ 5 - 19 species points = 1 \Box < 5 species points = 0 H 1.4. Interspersion of habitats Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. If you have four or more plant classes or three classes and open water, the rating is always high. 1 \square None = 0 points ☐ **Moderate** = 2 points \boxtimes Low = 1 point All three diagrams in this row are ☐ **HIGH** = 3points

| 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 3.3 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 <i>(structures for egg-laying by amphibians).</i> Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata). | | | | |
| Total for H 1 Add the points in the boxes above | 10 | | | |
| Rating of Site Potential If score is: \Box 15-18 = H \boxtimes 7-14 = M \Box 0-6 = L Record the rating of | 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 + [(%moderate and low intensity land uses)/2] = 7.5% + (0.5%/2) = 7.75 % If total accessible habitat is: | 0 | | | |
| H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2 = 91% + (6.5%/2) = 94.25% Undisturbed habitat > 50% of Polygon undisturbed habitat 10-50% and in 1-3 patches undisturbed habitat 10-50% and > 3 patches undisturbed habitat 10-50% and > 3 patches undisturbed habitat < 10% of 1 km Polygon points = 1 undisturbed habitat < 10% of 1 km Polygon points = 0 H 2.3. Land use intensity in 1 km Polygon: If > 50% of 1 km Polygon is high intensity land use ≤ 50% of 1 km Polygon is high intensity points = 0 | 3 | | | |
| Total for H 2 Add the points in the boxes above | 3 | | | |
| Rating of Landscape Potential If score is: □4-6 = H □1-3 = M □<1 = L Record the rating on | he 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 | 1 | | | |

Rating of Value If score is: $\Box 2 = H \boxtimes 1 = M \Box 0 = L$

Record the rating on the first page

WDFW Priority Habitats

<u>Priority habitats listed by WDFW</u> (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.

| \square 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 (<i>full descriptions in WDFW PHS report</i>). |
| \square Herbaceous Balds: Variable size patches of grass and forbs on shallow soils over bedrock. |
| \Box Old-growth/Mature forests: <u>Old-growth west of Cascade crest</u> – 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. <u>Mature forests</u> – 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 (<i>full descriptions in WDFW PHS report p. 158 – see web link above</i>). |
| \square Riparian : The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other. |
| \square Westside Prairies: Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (<i>full descriptions in WDFW PHS report p. 161 – see web link above</i>). |
| ☐ 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. (<i>full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page</i>). |
| \Box 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. |
| \Box Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation. |
| \Box Talus: Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, and or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs. |
| \boxtimes 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.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

| Wetland Type | Category |
|---|----------|
| Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met. | |
| SC 1.0. Estuarine wetlands | |
| Does the wetland meet the following criteria for Estuarine wetlands? | |
| \square 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 | |
| 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? | Cat. I |
| □Yes = Category I □No - Go to SC 1.2 | |
| SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? | Cat. I |
| ☐ The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has | Cat. I |
| less than 10% cover of non-native plant species. (If non-native species are <i>Spartina</i> , see page 25) | |
| \Box At least $\%$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. | Cat. II |
| ☐ The wetland has at least two of the following features: tidal channels, depressions with open water, | |
| or contiguous freshwater wetlands. | |
| area category: | |
| 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? | |
| SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? | |
| http://www.dnr.wa.gov/NHPwetlandviewer | Cat. I |
| http://file.dnr.wa.gov/publications/amp_nh_wetlands_trs.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? | |
| SC 3.0. Bogs | |
| Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key</i> | |
| 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? \Box Yes – Go to SC 3.3 \boxtimes 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? \Box Yes – Go to SC 3.3 \boxtimes No = Is not a bog | Cat I |
| 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% | Cat. I |
| cover of plant species listed in Table 4? \Box Yes = Is a Category I bog \Box 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 | |

| 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? <i>If you answer YES you will still need to rate the wetland based on its functions.</i> □ 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). | Cat. I | | |
| ☐Yes = Category I ☐No = Not a forested wetland for this section | | | |
| SC 5.0. Wetlands in Coastal Lagoons | | | |
| Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? | | | |
| \Box 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 | Cat. I | | |
| bottom) | . | | |
| ☐ 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? | | | |
| \square The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has | Cat. II | | |
| less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). | | | |
| ☐ At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | | | |
| un-mowed grassland. \Box 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: | Cat I | | |
| ☐ Long Beach Peninsula: Lands west of SR 103 | | | |
| ☐ Grayland-Westport: Lands west of SR 105 | | | |
| \square Ocean Shores-Copalis: Lands west of SR 115 and SR 109 | Cat. II | | |
| \square Yes – Go to SC 6.1 \square No = not an interdunal wetland for rating | Cat. II | | |
| 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)? \Box Yes = Category I \Box No – Go to SC 6.2 | Cat. III | | |
| 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 | | | |
| 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 | | |
| Tes - Category III LINO - Category IV | | | |
| | | | |
| Category of wetland based on Special Characteristics | NI A | | |
| If you answered No for all types, enter "Not Applicable" on Summary Form | NA | | |

Wetland name or number: Click here to enter text.

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RATING SUMMARY – Western Washington

Name of wetland (or ID #): XX Date of site visit: 2/25/2021

Rated by: Sam Payne and Roen Hohlfeld Trained by Ecology? ⊠Y □N Date of training: 9/2017

HGM Class used for rating: Depressional Wetland has multiple HGM classes? \square Y \boxtimes N

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

OVERALL WETLAND CATEGORY (based on functions ⊠ or special characteristics □)

1. Category of wetland based on FUNCTIONS

- ☐ Category I Total score = 23 27
- Category II – Total score = 20 - 22
- ☐ Category IV Total score = 9 15

| FUNCTION | Improving Water Quality | | Hydrologic | | Habitat | | | | | |
|------------------------|----------------------------|---|------------|----------|---------|----------|----------|---------|----------|-------|
| | | | | | Circle | the ap | propr | iate ra | tings | |
| Site Potential | Н | M | L | Н | М | <u>L</u> | Н | М | <u>L</u> | |
| Landscape Potential | Н | М | <u>L</u> | Н | М | <u>L</u> | <u>H</u> | М | L | |
| Value | <u>H</u> | М | L | <u>H</u> | М | L | Н | M | L | TOTAL |
| Score Based on Ratings | | 6 | | | 5 | | | 6 | | 17 |

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,M6 = H,M,L
- 6 = M,M,M
- 5 = H,L,L5 = 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 | | \boxtimes |

Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

| Map of: | To answer questions: | Figure # |
|---|----------------------|----------|
| Cowardin plant classes | D 1.3, H 1.1, H 1.4 | 1 |
| Hydroperiods | D 1.4, H 1.2 | 2 |
| Location of outlet (can be added to map of hydroperiods) | D 1.1, D 4.1 | 2 |
| Boundary of area within 150 ft of the wetland (can be added to another figure) | D 2.2, D 5.2 | 2 |
| Map of the contributing basin | D 4.3, D 5.3 | 3 |
| 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 | 4 |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website) | D 3.1, D 3.2 | 5 |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web) | D 3.3 | 6 |

HGM Classification of Wetlands in Western Washington

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you

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

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? \boxtimes NO – go to 2 \square **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. **YES** - The wetland class is **Flats** \boxtimes NO – go to 3 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; \square At least 30% of the open water area is deeper than 6.6 ft (2 m).

 \boxtimes NO – go to 5 \square **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

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

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

☑ 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.

| _ | 8 |
|---|---|
| | \Box The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that |
| | stream or river, |

 \Box The overbank flooding occurs at least once every 2 years.

4. Does the entire wetland unit **meet all** of the following criteria? \boxtimes The wetland is on a slope (*slope can be very gradual*),

⊠The water leaves the wetland **without being impounded**.

 \boxtimes NO – go to 4

| Wedana name of mamber, M | Wetland | name | or | number: | XX |
|--------------------------|---------|------|----|---------|----|
|--------------------------|---------|------|----|---------|----|

| | NO – go to 6 NOTE : The Riverine unit can contain depressions flooding | ☐ YES – The wetland class is Riverine s that are filled with water when the river is not |
|----|--|--|
| 6. | Is the entire wetland unit in a topographic depressurface, at some time during the year? <i>This mean of the wetland.</i> | ssion in which water ponds, or is saturated to the ns that any outlet, if present, is higher than the interior |
| | \square NO – go to 7 | \boxtimes YES – The wetland class is Depressional |
| 7. | Is the entire wetland unit located in a very flat are flooding? The unit does not pond surface water maintained by high groundwater in the area. The outlet. | • |
| | □ NO – go to 8 | \square 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 | HGM class to |
|---------------------------------------|---------------|
| being rated | use in rating |
| Slope + Riverine | Riverine |
| Slope + Depressional | Depressional |
| Slope + Lake Fringe | Lake Fringe |
| Depressional + Riverine along stream | Depressional |
| within boundary of depression | |
| Depressional + Lake Fringe | Depressional |
| Riverine + Lake Fringe | Riverine |
| Salt Water Tidal Fringe and any other | Treat as |
| class of freshwater wetland | 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.

| DEPRESSIONAL AND FLATS WETLANDS | | | | | | | |
|--|-----------------|-----------|--|--|--|--|--|
| Water Quality Functions - Indicators that the site functions to improve water quality | | | | | | | |
| D 1.0. Does the site have the potential to improve water quality? | | | | | | | |
| D 1.1. Characteristics of surface water outflows from the wetland: | | | | | | | |
| ☐ Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). | | | | | | | |
| points = 3 Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. | | | | | | | |
| — Wedana has an intermittently nowing stream of altern, of highly constituted permanently nowing | points = 2 | 1 | | | | | |
| oxtimes Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. | points = 1 | | | | | | |
| \square 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). \(\subseteq Yes | = 4 🗵 No = 0 | 0 | | | | | |
| D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Coward | in classes): | | | | | | |
| oxtimes Wetland has persistent, ungrazed, plants > 95% of area | points = 5 | | | | | | |
| \square Wetland has persistent, ungrazed, plants > 1/2 of area | points = 3 | 5 | | | | | |
| \square Wetland has persistent, ungrazed plants > 1/10 of area | points = 1 | | | | | | |
| \square 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 | 2 | | | | | |
| □ Area seasonally ponded is > ¼ total area of wetland □ Area seasonally ponded is > ½ total area of wetland □ Area seasonally ponded is > ½ total area of wetland □ Area seasonally ponded is > ½ total area of wetland □ Area seasonally ponded is > ½ total area of wetland □ Area seasonally ponded is > ½ total area of wetland □ Area seasonally ponded is > ½ total area of wetland □ Area seasonally ponded is > ½ total area of wetland □ Area seasonally ponded is > ½ total area of wetland □ Area seasonally ponded is > ½ total area of wetland □ Area seasonally ponded is > ½ total area of wetland □ Area seasonally ponded is > ½ total area of wetland □ Area seasonally ponded is > ½ total area of wetland □ Area seasonally ponded is > ½ total area of wetland □ Area seasonally ponded is > ½ total area of wetland □ Area seasonally ponded is > ½ total area of wetland □ Area seasonally ponded is > ½ total area of wetland □ Area seasonally ponded is > ½ total area of wetland □ Area seasonally ponded is > ½ total area seasonally pon | points = 2 | | | | | | |
| ☐ Area seasonally ponded is < ¼ total area of wetland | points = 0 | | | | | | |
| Total for D 1 Add the points in the box | es above | 8 | | | | | |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 0-5 = L Record the | rating on the f | irst 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? \Box Yes = 3 | 1 ⊠ No = 0 | 0 | | | | | |
| D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? \Box Yes = 3 | 1 ⊠ No = 0 | 0 | | | | | |
| D 2.3. Are there septic systems within 250 ft of the wetland? \Box Yes = 3 | 1 ⊠ No = 0 | 0 | | | | | |
| D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in | | 0 | | | | | |
| · | 1 ⊠ No = 0 | | | | | | |
| Total for D 2 Add the points in the box | es above | 0 | | | | | |
| Rating of Landscape Potential If score is: \square 3 or 4 = H \square 1 or 2 = M \boxtimes 0 = L Record the rating on the first p | | | | | | | |
| 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 | | 0 | | | | | |
| water that is on the 303(d) list? \Box Yes = 3 | 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? \Box Yes = 3 | 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)? $	extstyle 	extstyle $ | 2 □ No = 0 | 2 | | | | | |
| Total for D 3 Add the points in the box | kes above | 2 | | | | | |
| Rating of Value If score is: $\boxtimes 2-4 = H \square 1 = M \square 0 = L$ Record the | rating on the f | irst page | | | | | |

| DEPRESSIONAL AND FLATS WETLANDS | |
|--|------------|
| Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradati | on |
| 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 | |
| $\ \square$ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently | 0 |
| flowing outlet. points = 2 | 0 |
| ☐ 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. <u>Depth of storage during wet periods:</u> <i>Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part.</i> | |
| ☐ Marks of ponding are 3 ft or more above the surface or bottom of outlet. points = 7 | |
| ☐ Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet. points = 5 | 0 |
| \square Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet. points = 3 | U |
| \Box The wetland is a "headwater" wetland. points = 3 | |
| ☐ Wetland is flat but has small depressions on the surface that trap water. points = 1 | |
| \boxtimes Marks of ponding less than 0.5 ft (6 in). points = 0 | |
| D 4.3. <u>Contribution of the wetland to storage in the watershed</u> : <i>Estimate the ratio of the area of upstream basin contributing surface water to the wetland to the area of the wetland unit itself.</i> | |
| \Box The area of the basin is less than 10 times the area of the unit. points = 5 | 0 |
| \Box The area of the basin is 10 to 100 times the area of the unit. points = 3 | |
| \boxtimes The area of the basin is more than 100 times the area of the unit. points = 0 | |
| \Box Entire wetland is in the Flats class. points = 5 | |
| Total for D 4 Add the points in the boxes above | 0 |
| Rating of Site Potential If score is: \Box 12-16 = H \Box 6-11 = M \boxtimes 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? \square Yes = 1 \boxtimes No = 0 | 0 |
| D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? \square Yes = 1 \square No = 0 | 0 |
| D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? \Box Yes = 1 \boxtimes No = 0 | 0 |
| Total for D 5 Add the points in the boxes above | 0 |
| Rating of Landscape Potential If score is: $\square 3 = H \square 1$ or $2 = M \square 0 = L$ Record the rating on the | |
| D.C.O. And the hydrologic functions provided by the site valuable to esciet. | |
| D 6.0. Are the hydrologic functions provided by the site valuable to society? | |
| D 6.1. The unit is in a landscape that has flooding problems. Choose the description that best matches conditions around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met. The wetland captures surface water that would otherwise flow down-gradient into areas where flooding has damaged human or natural resources (e.g., houses or salmon redds): ■ Flooding occurs in a sub-basin that is immediately down-gradient of unit. points = 2 ■ Surface flooding problems are in a sub-basin farther down-gradient. points = 1 | |
| ☐ Flooding from groundwater is an issue in the sub-basin. points = 1 | 2 |
| | |
| \Box 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 | |
| | |
| \Box 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? | 0 |
| | 0 |

| 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 | 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 | 1 |
| H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle If you counted: > 19 species points = 2 > 5 - 19 species points = 1 < 5 species points = 0 | 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 All three diagrams in this row are HIGH = 3points | 1 |

| 114 F C 11 12 C . | | 1 | | | | | |
|--|--|----------------|--|--|--|--|--|
| H 1.5. Special habitat features: | | | | | | | |
| Check the habitat features that are present in the wetland. <i>The number of the control of the co</i> | | | | | | | |
| ☐ 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 overhanger over a stream (or ditch) in, or contiguous with the wetland, for at least | | | | | | | |
| \Box Stable steep banks of fine material that might be used by beaver or | | 0 | | | | | |
| slope) OR signs of recent beaver activity are present (cut shrubs or trees that have not yet weathered | | | | | | | |
| where wood is exposed). | | | | | | | |
| \Box 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 strat | um of plants (see H 1.1 for list of | | | | | | |
| strata). | | | | | | | |
| Total for H 1 | Add the points in the boxes above | 4 | | | | | |
| Rating of Site Potential If score is: \Box 15-18 = H \Box 7-14 = M \boxtimes 0-6 = L | Record the rating on t | the first page | | | | | |
| H 2.0. Does the landscape have the potential to support the habitat fund | tions of the site? | | | | | | |
| H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit). | | | | | | | |
| Calculate: % undisturbed habitat + [(%moderate and low intensity land u | ses)/2] = 39% + (1%/2) = 39.5% | | | | | | |
| If total accessible habitat is: | 35,7 (2,7 2) | | | | | | |
| | nainta 2 | 2 | | | | | |
| \boxtimes > 1/3 (33.3%) of 1 km Polygon | points = 3 | 3 | | | | | |
| ☐ 20-33% of 1 km Polygon | points = 2 | | | | | | |
| ☐ 10-19% of 1 km Polygon | points = 1 | | | | | | |
| ☐ < 10% of 1 km Polygon | points = 0 | | | | | | |
| H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. | | | | | | | |
| Calculate: % undisturbed habitat + [(%moderate and low intensity land u | ses)/2 = 90.5% + (6.5%/2) = 93.75 % | | | | | | |
| ☑ Undisturbed habitat > 50% of Polygon | points = 3 | 3 | | | | | |
| $\ \square$ Undisturbed habitat 10-50% and in 1-3 patches | points = 2 | 3 | | | | | |
| ☐ Undisturbed habitat 10-50% and > 3 patches | points = 1 | | | | | | |
| ☐ Undisturbed habitat < 10% of 1 km Polygon | points = 0 | | | | | | |
| H 2.3. Land use intensity in 1 km Polygon: If | | | | | | | |
| ☐ > 50% of 1 km Polygon is high intensity land use | points = (- 2) | 0 | | | | | |
| | points = 0 | | | | | | |
| Total for H 2 | Add the points in the boxes above | 6 | | | | | |
| Rating of Landscape Potential If score is: ⊠4-6 = H □1-3 = M □<1 = L | Record the rating on th | ne 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 po | licies? 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 pla | int or animal on the state or federal lists) | | | | | | |
| ☐ It is mapped as a location for an individual WDFW priority species | | 1 | | | | | |
| \square It is a Wetland of High Conservation Value as determined by the I | | | | | | | |
| ☐ It has been categorized as an important habitat site in a local or r | egional comprehensive plan, | | | | | | |
| in a Shoreline Master Plan, or in a watershed plan | noints = 1 | | | | | | |
| ☑ Site has 1 or 2 priority habitats (listed on next page) within 100 m☐ Site does not meet any of the criteria above | points = 1 points = 0 | | | | | | |
| Site does not meet any of the triteria above | points = 0 | | | | | | |

Rating of Value If score is: $\Box 2 = H \boxtimes 1 = M \Box 0 = L$

Record the rating on the first page

WDFW Priority Habitats

<u>Priority habitats listed by WDFW</u> (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.

| \square 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 (<i>full descriptions in WDFW PHS report</i>). |
| \square Herbaceous Balds: Variable size patches of grass and forbs on shallow soils over bedrock. |
| \Box Old-growth/Mature forests: <u>Old-growth west of Cascade crest</u> – 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. <u>Mature forests</u> – 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 (<i>full descriptions in WDFW PHS report p. 158 – see web link above</i>). |
| \square 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 (<i>full descriptions in WDFW PHS report p. 161 – see web link above</i>). |
| ☐ 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. (<i>full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page</i>). |
| \Box 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. |
| \Box Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation. |
| \Box Talus: Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, and or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs. |
| \boxtimes 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.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

| Wetland Type | Category |
|--|----------|
| Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met. | |
| SC 1.0. Estuarine wetlands | |
| Does the wetland meet the following criteria for Estuarine wetlands? | |
| \square The dominant water regime is tidal, | |
| \square Vegetated, and | |
| ☐ With a salinity greater than 0.5 ppt ☐ Yes –Go to SC 1.1 ☒ No= Not an estuarine wetland | |
| 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? | Cat. I |
| $\Box Yes = \textbf{Category I} \qquad \Box No - Go to \textbf{SC 1.2}$ | |
| SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? | |
| \square The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has | Cat. I |
| less than 10% cover of non-native plant species. (If non-native species are Spartina, see page 25) | |
| \square At least $lpha$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | Cat. II |
| un- mowed grassland. | Cat. II |
| ☐ The wetland has at least two of the following features: tidal channels, depressions with open water, | |
| or contiguous freshwater wetlands. \square Yes = Category I \square No= Category 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? $	extstyle 	ext$ | |
| SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? | |
| $\underline{\text{http://www.dnr.wa.gov/NHPwetlandviewer}} \qquad \qquad \Box \text{Yes} = \textbf{Category I} \qquad \boxtimes \text{No} = \textbf{Not a WHCV}$ | Cat. I |
| SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? | Cuti |
| http://file.dnr.wa.gov/publications/amp_nh_wetlands_trs.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? | |
| <u> </u> | |
| SC 3.0. Bogs Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key</i> | |
| 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? \Box Yes – Go to SC 3.3 \boxtimes 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? \Box Yes – Go to SC 3.3 \boxtimes 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% | Cat. I |
| cover of plant species listed in Table 4? \Box Yes = Is a Category I bog \Box 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 | |

| 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? <i>If you answer YES you will still need to rate the wetland based on its functions.</i> □ 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). | Cat. I | | |
| ☐Yes = Category I ☐No = Not a forested wetland for this section | | | |
| SC 5.0. Wetlands in Coastal Lagoons | | | |
| Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? | | | |
| \Box 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 | Cat. I | | |
| bottom) | . | | |
| ☐ 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? | | | |
| \square 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). | | | |
| \square At least $rac{3}{4}$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | | | |
| un- mowed grassland. \Box 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: | Cat I | | |
| ☐ Long Beach Peninsula: Lands west of SR 103 | | | |
| ☐ Grayland-Westport: Lands west of SR 105 | | | |
| \square Ocean Shores-Copalis: Lands west of SR 115 and SR 109 | Cat. II | | |
| \square Yes – Go to SC 6.1 \square No = not an interdunal wetland for rating | Cat. II | | |
| 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)? \Box Yes = Category I \Box No – Go to SC 6.2 | Cat. III | | |
| 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 | | | |
| 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 | | |
| Tes - Category III LINO - Category IV | | | |
| | | | |
| Category of wetland based on Special Characteristics | NI A | | |
| If you answered No for all types, enter "Not Applicable" on Summary Form | NA | | |

Wetland name or number: Click here to enter text.

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WETLAND RATING FORMS

AREA 7 - OVERLOOK AND LOOP TRAIL

Wetland B

Wetland Z

Wetland NN

Wetland YY

Wetland ZZ

Wetland AAA

Wetland BBB

RATING SUMMARY – Western Washington

Name of wetland (or ID #): \underline{B} Date of site visit: $\underline{4/15/2021}$

Rated by: <u>Jamie Sloan and Roen Hohlfeld</u> Trained by Ecology? ⊠Y □N Date of training: <u>9/2017</u>

HGM Class used for rating: <u>Depressional</u> 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: Google Earth, Pierce County

OVERALL WETLAND CATEGORY (based on functions ⊠ or special characteristics □)

1. Category of wetland based on FUNCTIONS

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

| FUNCTION | Improving Water Quality | | Hydrologic | | Habitat | | | | | |
|------------------------|--------------------------------|---|------------|----------|---------|----------|----------|---|----------|-------|
| | Circle the appropriate ratings | | | | | | | | | |
| Site Potential | Н | M | L | Н | M | L | Н | М | <u>L</u> | |
| Landscape Potential | Н | М | <u>L</u> | Н | М | <u>L</u> | <u>H</u> | М | L | |
| Value | <u>H</u> | М | L | <u>H</u> | М | L | Н | M | L | TOTAL |
| Score Based on Ratings | | 6 | | | 6 | | | 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,L4 = 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 | | \boxtimes |

Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

| Map of: | To answer questions: | Figure # |
|---|----------------------|----------|
| Cowardin plant classes | D 1.3, H 1.1, H 1.4 | 1 |
| Hydroperiods | D 1.4, H 1.2 | 2 |
| Location of outlet (can be added to map of hydroperiods) | D 1.1, D 4.1 | 2 |
| Boundary of area within 150 ft of the wetland (can be added to another figure) | D 2.2, D 5.2 | 2 |
| Map of the contributing basin | D 4.3, D 5.3 | 3 |
| 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 | 4 |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website) | D 3.1, D 3.2 | 5 |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web) | D 3.3 | 6 |

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 cont | rolled by tides except during floods? |
|----|--|--|--|
| | ⊠N0 – go to 2 | □ YES - 1 | the wetland class is Tidal Fringe – go to 1.1 |
| 1 | .1 Is the salinity of the v | water during periods of ann | ual low flow below 0.5 ppt (parts per thousand)? |
| | If your wetland can b | nge it is an Estuarine wetla | YES – Freshwater Tidal Fringe Tidal Fringe use the forms for Riverine wetlands. If it and and is not scored. This method cannot be used to |
| 2. | | it is flat and precipitation is off are NOT sources of water | the only source (>90%) of water to it. Groundwater to the unit. |
| | \boxtimes NO – go to 3 If your wetland can be | classified as a Flats wetland, | \square YES – The wetland class is Flats use the form for Depressional wetlands. |
| 3. | ☐ The vegetated part of plants on the surface | d unit meet all of the follow of the wetland is on the shor e at any time of the year) at open water area is deeper th | es of a body of permanent open water (without any least 20 ac (8 ha) in size; |
| | ⊠NO – go to 4 | □ YES – The wetla | nd class is Lake Fringe (Lacustrine Fringe) |
| 4. | ☑ The wetland is on a☑ The water flows threeseeps. It may flow s | <u> </u> | dual), ection (unidirectional) and usually comes from in a swale without distinct banks, |
| | \boxtimes NO – go to 5 | | \square YES – The wetland class is Slope |
| | | | of wetlands except occasionally in very small and ssions are usually <3 ft diameter and less than 1 ft |
| 5. | ☐The unit is in a valle stream or river, | d unit meet all of the follow y, or stream channel, where ng occurs at least once ever | it gets inundated by overbank flooding from that |

| Wetland name | or number: | В |
|--------------|------------|---|
|--------------|------------|---|

| | NO – go to 6NOTE: The Riverine unit can contain depressions flooding | ☐ YES – The wetland class is Riverine s that are filled with water when the river is not |
|----|--|--|
| 6. | Is the entire wetland unit in a topographic depressurface, at some time during the year? <i>This mean of the wetland.</i> | ssion in which water ponds, or is saturated to the as that any outlet, if present, is higher than the interior |
| | \square NO – go to 7 | ⊠YES – The wetland class is Depressional |
| 7. | Is the entire wetland unit located in a very flat are flooding? The unit does not pond surface water r maintained by high groundwater in the area. The outlet. | <u>-</u> |
| | □ NO – go to 8 | \square 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 | HGM class to |
|---------------------------------------|---------------|
| being rated | use in rating |
| Slope + Riverine | Riverine |
| Slope + Depressional | Depressional |
| Slope + Lake Fringe | Lake Fringe |
| Depressional + Riverine along stream | Depressional |
| within boundary of depression | |
| Depressional + Lake Fringe | Depressional |
| Riverine + Lake Fringe | Riverine |
| Salt Water Tidal Fringe and any other | Treat as |
| class of freshwater wetland | 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.

| 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: | 3 | |
| \square 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 = 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 □ Wetland has persistent, ungrazed, plants > 1/2 of area □ Wetland has persistent, ungrazed plants > 1/10 of area □ Wetland has persistent, ungrazed plants < 1/10 of area □ Wetland has persistent, ungrazed plants < 1/10 of area | 5 | |
| 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 □ Area seasonally ponded is > ¼ total area of wetland □ Area seasonally ponded is < ¼ total area of wetland □ Area seasonally ponded is < ¼ total area of wetland □ Area seasonally ponded is < ¼ total area of wetland | 0 | |
| Total for D 1 Add the points in the boxes above | 8 | |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 0-5 = L Record the rating on the first | | |
| 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? \square Yes = 1 \boxtimes No = 0 | 0 | |
| D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? \square Yes = 1 \boxtimes No = 0 D 2.3. Are there septic systems within 250 ft of the wetland? \square Yes = 1 \boxtimes No = 0 | | |
| D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1-D 2.3? Source: | 0 | |
| Total for D 2 Add the points in the boxes above | 0 | |
| Rating of Landscape Potential If score is: \Box 3 or 4 = H \Box 1 or 2 = M \boxtimes 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? \Box Yes = 1 \boxtimes 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)? | 2 | |
| Total for D 3 Add the points in the boxes above | 2 | |
| Rating of Value If score is: $\square 2-4 = H$ $\square 1 = M$ $\square 0 = L$ Record the rating on the | ne first page | |

| DEPRESSIONAL AND FLATS WETLANDS | |
|--|------------|
| Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradati | on |
| D 4.0. Does the site have the potential to reduce flooding and erosion? | |
| D 4.1. Characteristics of surface water outflows from the wetland: ☐ Wetland is a depression or flat depression with no surface water leaving it (no outlet). points = 4 ☐ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. points = 2 ☐ Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1 ☐ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. points = 0 | 4 |
| D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part. □ Marks of ponding are 3 ft or more above the surface or bottom of outlet. points = 7 □ Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet. points = 5 □ Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet. points = 3 □ The wetland is a "headwater" wetland. points = 3 □ Wetland is flat but has small depressions on the surface that trap water. points = 1 □ Marks of ponding less than 0.5 ft (6 in). | 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. □ The area of the basin is 10 to 100 times the area of the unit. □ The area of the basin is more than 100 times the area of the unit. □ Entire wetland is in the Flats class. | 5 |
| Total for D 4 Add the points in the boxes above | 9 |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 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? \square Yes = 1 \boxtimes No = 0 | 0 |
| D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? \Box Yes = 1 \boxtimes No = 0 | 0 |
| D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? ☐ Yes = 1 ☐ No = 0 | 0 |
| Total for D 5 Add the points in the boxes above | 0 |
| Rating of Landscape Potential If score is: $\Box 3 = H$ $\Box 1$ or $2 = M$ $\boxtimes 0 = L$ 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 • ☐ 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. | 2 |
| 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: $\boxtimes 2-4 = H$ $\square 1 = M$ $\square 0 = L$

Record the rating on the first page

| These questions apply to wetlands of all HGM classes. | |
|---|---|
| HABITAT FUNCTIONS - Indicators that site functions to provide important habitat | |
| H 1.0. Does the site have the potential to provide habitat? | |
| H 1.1. Structure of plant community: Indicators are Cowardin classes and strata within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked. □ Aquatic bed | 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 | 1 |
| H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle If you counted: > 19 species points = 2 | 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 All three diagrams in this row are □ HIGH = 3points | 0 |

| 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). | | |
| \square Standing snags (dbh > 4 in) within the wetland. | | |
| ☐ Undercut banks are present for at least 6.6 ft (2 m) AND/OR overhanging plants extended | ends 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). | | |
| \square Stable steep banks of fine material that might be used by beaver or muskrat for de | enning (> 30 degree | 2 |
| slope) OR signs of recent beaver activity are present (cut shrubs or trees that have | | |
| where wood is exposed). | | |
| ☐ At least ¼ ac of thin-stemmed persistent plants or woody branches are present in ar | eas 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 (s | ee H 1.1 for list of | |
| strata). | | |
| Total for H 1 Add the po | ints in the boxes above | 5 |
| Rating of Site Potential If score is: \Box 15-18 = H \Box 7-14 = M \boxtimes 0-6 = L | Record the rating on t | the first page |
| H 2.0. Does the landscape have the potential to support the habitat functions of the s | | |
| | ite: | |
| H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>). | 444- | |
| Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2] = 45% | + (1%/2) =45.5% | |
| If total accessible habitat is: | | |
| \boxtimes > 1/3 (33.3%) of 1 km Polygon | points = 3 | 3 |
| ☐ 20-33% of 1 km Polygon | points = 2 | |
| ☐ 10-19% of 1 km Polygon | points = 1 | |
| ☐ < 10% of 1 km Polygon | points = 0 | |
| H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. | | |
| Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2 = 91.5 % | 6 + (5.5%/2) = 94.25% | |
| □ Undisturbed habitat > 50% of Polygon | points = 3 | _ |
| ☐ Undisturbed habitat 10-50% and in 1-3 patches | points = 2 | 3 |
| ☐ Undisturbed habitat 10-50% and > 3 patches | points = 1 | |
| ☐ Undisturbed habitat < 10% of 1 km Polygon | points = 0 | |
| H 2.3. Land use intensity in 1 km Polygon: If | points o | |
| □ > 50% of 1 km Polygon is high intensity land use | points = (- 2) | 0 |
| ≥ 50% of 1 km Polygon is high intensity ≤ 50% of 1 km Polygon is high intensity | • | O |
| | points = 0 | 6 |
| | ints in the boxes above | |
| Rating of Landscape Potential If score is: $\square 4-6 = H \square 1-3 = M \square < 1 = L$ | Record the rating on th | ie jirst 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 | |
| \square It has 3 or more priority habitats within 100 m (see next page) | | |
| \square It provides habitat for Threatened or Endangered species (any plant or animal o | n the state or federal lists) | |
| \square It is mapped as a location for an individual WDFW priority species | | 1 |
| \square It is a Wetland of High Conservation Value as determined by the Department of | Natural Resources | |
| \square It has been categorized as an important habitat site in a local or regional compr | ehensive 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 | |

Rating of Value If score is: $\Box 2 = H \boxtimes 1 = M \Box 0 = L$

Record the rating on the first page

WDFW Priority Habitats

<u>Priority habitats listed by WDFW</u> (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.

| \square 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 (<i>full descriptions in WDFW PHS report</i>). |
| \square Herbaceous Balds: Variable size patches of grass and forbs on shallow soils over bedrock. |
| \Box Old-growth/Mature forests: <u>Old-growth west of Cascade crest</u> – 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. <u>Mature forests</u> – 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 (<i>full descriptions in WDFW PHS report p. 158 – see web link above</i>). |
| \square 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 (<i>full descriptions in WDFW PHS report p. 161 – see web link above</i>). |
| ☐ 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. (<i>full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page</i>). |
| \Box 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. |
| \Box Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation. |
| \Box Talus: Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, and or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs. |
| \boxtimes 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.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

| Wetland Type | Category |
|--|----------|
| Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met. | |
| SC 1.0. Estuarine wetlands | |
| Does the wetland meet the following criteria for Estuarine wetlands? | |
| ☐ The dominant water regime is tidal, | |
| \square Vegetated, and | |
| ☐ With a salinity greater than 0.5 ppt ☐ Yes –Go to SC 1.1 ☐ No= Not an estuarine wetland | |
| 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? | Cat. I |
| \square Yes = Category I \square No - Go to SC 1.2 | |
| SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? | |
| \square The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has | Cat. I |
| less than 10% cover of non-native plant species. (If non-native species are Spartina, see page 25) | |
| \square At least $rac{\pi}{4}$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | . |
| un- mowed grassland. | Cat. II |
| \Box The wetland has at least two of the following features: tidal channels, depressions with open water, | |
| or contiguous freshwater wetlands. \square Yes = Category I \square No= Category 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? | |
| SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? | |
| http://www.dnr.wa.gov/NHPwetlandviewer □Yes = Category I ☑No = Not a WHCV | |
| SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? | Cat. I |
| http://file.dnr.wa.gov/publications/amp nh wetlands trs.pdf | |
| \Box Yes – Contact WNHP/WDNR and go to SC 2.4 \Box 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? \Box Yes = Category I \Box No = Not a WHCV | |
| 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? \Box Yes – Go to SC 3.3 \boxtimes 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? | Cat. I |
| 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 | Cat. 1 |
| 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 | 1 |

| 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? <i>If you answer YES you will still need to rate the wetland based on its functions.</i> □ 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). | Cat. I |
| ☐Yes = Category I ☐No = Not a forested wetland for this section | |
| SC 5.0. Wetlands in Coastal Lagoons | |
| Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? | |
| \Box 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 | Cat. I |
| bottom) | . |
| ☐ 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? | |
| \square The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has | Cat. II |
| less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). | |
| \square At least $rac{3}{4}$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | |
| un- mowed grassland. \Box 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: | Cat I |
| ☐ Long Beach Peninsula: Lands west of SR 103 | |
| ☐ Grayland-Westport: Lands west of SR 105 | |
| \square Ocean Shores-Copalis: Lands west of SR 115 and SR 109 | Cat. II |
| \square Yes – Go to SC 6.1 \square No = not an interdunal wetland for rating | Cat. II |
| 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)? \Box Yes = Category I \Box No – Go to SC 6.2 | Cat. III |
| 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 | |
| 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 |
| Tes - Category III LINO - Category IV | |
| | |
| Category of wetland based on Special Characteristics | NI A |
| If you answered No for all types, enter "Not Applicable" on Summary Form | NA |

Wetland name or number: Click here to enter text.

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RATING SUMMARY – Western Washington

Name of wetland (or ID #): \underline{Z} Date of site visit: $\underline{8/9/2021}$

Rated by: Nell Lund and Roen Hohlfeld Trained by Ecology? ⊠Y □N Date of training: 9/2017

HGM Class used for rating: <u>Depressional</u> 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: Google Earth, Pierce County

OVERALL WETLAND CATEGORY (based on functions ⊠ or special characteristics □)

1. Category of wetland based on FUNCTIONS

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

| FUNCTION | | mprov ter Q | ing uality | Hy | ydrolo | gic | | Habita | at | |
|------------------------|----------|----------------|---------------|----------|--------|----------|----------|---------|-------|-------|
| | | | | | Circle | the ap | propr | iate ra | tings | |
| Site Potential | Н | M | L | Н | М | L | Н | M | L | |
| Landscape Potential | Н | M | L | Н | М | <u>L</u> | <u>H</u> | М | L | |
| Value | <u>H</u> | М | L | <u>H</u> | М | L | <u>H</u> | М | L | TOTAL |
| Score Based on Ratings | | 7 | | | 5 | | | 8 | | 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 | | \boxtimes |

Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

| Map of: | To answer questions: | Figure # |
|---|----------------------|----------|
| Cowardin plant classes | D 1.3, H 1.1, H 1.4 | 1 |
| Hydroperiods | D 1.4, H 1.2 | 2 |
| Location of outlet (can be added to map of hydroperiods) | D 1.1, D 4.1 | 2 |
| Boundary of area within 150 ft of the wetland (can be added to another figure) | D 2.2, D 5.2 | 2 |
| Map of the contributing basin | D 4.3, D 5.3 | 3 |
| 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 | 4 |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website) | D 3.1, D 3.2 | 5 |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web) | D 3.3 | 6 |

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 cont | rolled by tides except during floods? |
|----|--|--|--|
| | ⊠N0 – go to 2 | □ YES - 1 | the wetland class is Tidal Fringe – go to 1.1 |
| 1 | .1 Is the salinity of the v | water during periods of ann | ual low flow below 0.5 ppt (parts per thousand)? |
| | If your wetland can b | nge it is an Estuarine wetla | YES – Freshwater Tidal Fringe Tidal Fringe use the forms for Riverine wetlands. If it and and is not scored. This method cannot be used to |
| 2. | | it is flat and precipitation is off are NOT sources of water | the only source (>90%) of water to it. Groundwater to the unit. |
| | \boxtimes NO – go to 3 If your wetland can be | classified as a Flats wetland, | \square YES – The wetland class is Flats use the form for Depressional wetlands. |
| 3. | ☐ The vegetated part of plants on the surface | d unit meet all of the follow of the wetland is on the shor e at any time of the year) at open water area is deeper th | es of a body of permanent open water (without any least 20 ac (8 ha) in size; |
| | ⊠NO – go to 4 | □ YES – The wetla | nd class is Lake Fringe (Lacustrine Fringe) |
| 4. | ☑ The wetland is on a☑ The water flows threeseeps. It may flow s | <u> </u> | dual), ection (unidirectional) and usually comes from in a swale without distinct banks, |
| | \boxtimes NO – go to 5 | | \square YES – The wetland class is Slope |
| | | | of wetlands except occasionally in very small and ssions are usually <3 ft diameter and less than 1 ft |
| 5. | ☐The unit is in a valle stream or river, | d unit meet all of the follow y, or stream channel, where ng occurs at least once ever | it gets inundated by overbank flooding from that |

| | NO – go to 6NOTE: The Riverine unit can contain depressions flooding | ☐ YES – The wetland class is Riverine s that are filled with water when the river is not |
|----|--|--|
| 6. | Is the entire wetland unit in a topographic depressurface, at some time during the year? <i>This mean of the wetland.</i> | ssion in which water ponds, or is saturated to the as that any outlet, if present, is higher than the interior |
| | \square NO – go to 7 | ⊠YES – The wetland class is Depressional |
| 7. | Is the entire wetland unit located in a very flat are flooding? The unit does not pond surface water r maintained by high groundwater in the area. The outlet. | <u>-</u> |
| | □ NO – go to 8 | \square 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 | Depressional |
| within boundary of depression | |
| Depressional + Lake Fringe | Depressional |
| Riverine + Lake Fringe | Riverine |
| Salt Water Tidal Fringe and any other | Treat as |
| class of freshwater wetland | 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.

| DEPRESSIONAL AND FLATS WETLANDS | | |
|--|--------------------|-----------|
| Water Quality Functions - Indicators that the site functions to improve water | er 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: | | |
| \square Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (| | |
| \square Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowin | points = 3 | 4 |
| wettand has an intermittently nowing stream of ditch, Ok nightly constricted permanently nowing | points = 2 | 1 |
| oxtimes Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. | points = 1 | |
| \square 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 | s = 4 ⊠ No = 0 | 0 |
| D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Coward | lin classes): | |
| ☑ Wetland has persistent, ungrazed, plants > 95% of area | points = 5 | |
| \square Wetland has persistent, ungrazed, plants > 1/2 of area | points = 3 | 5 |
| \square Wetland has persistent, ungrazed plants > 1/10 of area | points = 1 | |
| \square 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 | 0 |
| ☐ Area seasonally ponded is > ¼ total area of wetland | points = 2 | |
| ☑ Area seasonally ponded is < ¼ total area of wetland | points = 0 | |
| Total for D 1 Add the points in the bo | xes above | 6 |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 0-5 = L Record the | rating on the f | irst 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? | 1 ⊠ No = 0 | 0 |
| D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? \Box Yes = | 1 ⊠ No = 0 | 0 |
| D 2.3. Are there septic systems within 250 ft of the wetland? \Box Yes = | 1 ⊠ No = 0 | 0 |
| D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in | _ | 1 |
| · | 1 □ No = 0 | _ |
| Total for D 2 Add the points in the bo | xes above | 1 |
| Rating of Landscape Potential If score is: $\square 3$ or $4 = H$ $\boxtimes 1$ or $2 = M$ $\square 0 = L$ Record the in | rating on the fir. | st 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 | | 0 |
| water that is on the 303(d) list? \Box 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? \Box 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)? \boxtimes Yes = | 2 □ No = 0 | 2 |
| Total for D 3 Add the points in the bo | xes above | 2 |
| Rating of Value If score is: $\square 2-4 = H \square 1 = M \square 0 = L$ Record the | rating on the f | irst page |

| DEPRESSIONAL AND FLATS WETLANDS | |
|--|------------|
| Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradat | ion |
| D 4.0. Does the site have the potential to reduce flooding and erosion? | |
| D 4.1. Characteristics of surface water outflows from the wetland: ☐ Wetland is a depression or flat depression with no surface water leaving it (no outlet). points = 4 ☐ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. points = 2 ☐ Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1 ☐ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. points = 0 | 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. □ Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet. □ Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet. □ The wetland is a "headwater" wetland. □ Wetland is flat but has small depressions on the surface that trap water. □ Marks of ponding less than 0.5 ft (6 in). | 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. ☐ The area of the basin is 10 to 100 times the area of the unit. ☐ The area of the basin is more than 100 times the area of the unit. ☐ Entire wetland is in the Flats class. | 5 |
| Total for D 4 Add the points in the boxes above | 5 |
| Rating of Site Potential If score is: \Box 12-16 = H \Box 6-11 = M \boxtimes 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? \square Yes = 1 \boxtimes No = 0 | 0 |
| D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? \square Yes = 1 \square No = 0 | 0 |
| D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? | 0 |
| Total for D 5 Add the points in the boxes above | 0 |
| Rating of Landscape Potential If score is: $\Box 3 = H$ $\Box 1$ or $2 = M$ $\boxtimes 0 = L$ 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 ■ □ 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 | 2 |
| ☐ 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? | |
| 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: $\square 2-4 = H$ $\square 1 = M$ $\square 0 = L$ Record the rating on the | first page |

| These questions apply to wetlands of all HGM classes. | |
|--|---|
| HABITAT FUNCTIONS - Indicators that site functions to provide important habitat | |
| H 1.0. Does the site have the potential to provide habitat? | |
| H 1.1. Structure of plant community: Indicators are Cowardin classes and strata within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked. Aquatic bed Emergent Scrub-shrub (areas where shrubs have > 30% cover) Forested (areas where trees have > 30% cover) 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 □ Seasonally flooded or inundated □ Saturated only □ Permanently flowing stream or river in, or adjacent to, the wetland □ Seasonally flowing stream in, or adjacent to, the wetland □ Lake Fringe wetland □ Freshwater tidal wetland □ Seasonally flowing stream or river in, or adjacent to, the wetland □ Lake Fringe wetland □ Seasonally flowing stream or river in, or adjacent to, the wetland □ Lake Fringe wetland □ Seasonally flowing stream or river in, or adjacent to, the wetland □ Lake Fringe wetland □ Seasonally flowing stream or river in, or adjacent to, the wetland □ Lake Fringe wetland □ Seasonally flowing stream or river in, or adjacent to, the wetland □ Lake Fringe wetland □ Seasonally flowing stream or river in, or adjacent to, the wetland | 2 |
| H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle If you counted: > 19 species points = 2 > 5 - 19 species points = 1 < 5 species | 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 All three diagrams in this row are HIGH = 3points | 0 |

| 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. | 1 |
| oxtimes 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 | 3 |
| 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). | |
| Total for H 1 Add the points in the boxes above | 7 |
| Rating of Site Potential If score is: \Box 15-18 = H \boxtimes 7-14 = M \Box 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 + [(%moderate and low intensity land uses)/2] = 55% + (2%/2) =56% | |
| | |
| If total accessible habitat is: | _ |
| \boxtimes > 1/3 (33.3%) of 1 km Polygon points = 3 | 3 |
| \square 20-33% of 1 km Polygon points = 2 | |
| \square 10-19% of 1 km Polygon points = 1 | |
| \square < 10% of 1 km Polygon points = 0 | |
| H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. | |
| Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2 = 90% + (6%/2) = 96% | |
| ☐ Undisturbed habitat > 50% of Polygon points = 3 | |
| ☐ Undisturbed habitat 10-50% and in 1-3 patches points = 2 | 3 |
| ☐ Undisturbed habitat 10-50% and > 3 patches points = 1 | |
| ☐ Undisturbed habitat < 10% of 1 km Polygon points = 0 | |
| H 2.3. Land use intensity in 1 km Polygon: If | |
| □ > 50% of 1 km Polygon is high intensity land use points = (- 2) | 0 |
| $\boxtimes \le 50\%$ of 1 km Polygon is high intensity and age $\boxtimes \le 50\%$ of 1 km Polygon is high intensity points = 0 | |
| Total for H 2 Add the points in the boxes above | 6 |
| · | |
| Rating of Landscape Potential If score is: $\square 4-6 = H \square 1-3 = M \square < 1 = L$ Record the rating on a | ne jirst 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) | |
| \square It is mapped as a location for an individual WDFW priority species | 2 |
| \square It is a Wetland of High Conservation Value as determined by the Department of Natural Resources | |
| \square 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 | |
| \square Site does not meet any of the criteria above points = 0 | |

Rating of Value If score is: $\boxtimes 2 = H \square 1 = M \square 0 = L$

Record the rating on the first page

WDFW Priority Habitats

<u>Priority habitats listed by WDFW</u> (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.

| \square Aspen Stands: Pure or mixed stands of aspen greater than 1 ac (0.4 ha). |
|---|
| \boxtimes Biodiversity Areas and Corridors : Areas of habitat that are relatively important to various species of native fish and wildlife (<i>full descriptions in WDFW PHS report</i>). |
| \square Herbaceous Balds: Variable size patches of grass and forbs on shallow soils over bedrock. |
| \boxtimes Old-growth/Mature forests: <u>Old-growth west of Cascade crest</u> – 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. <u>Mature forests</u> – 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 (<i>full descriptions in WDFW PHS report p. 158 – see web link above</i>). |
| \boxtimes Riparian : The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other. |
| \square Westside Prairies: Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (<i>full descriptions in WDFW PHS report p. 161 – see web link above</i>). |
| ☑ 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). |
| \Box 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. |
| \Box Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation. |
| \Box Talus: Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, and or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs. |
| \boxtimes 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.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

| Wetland Type | Category |
|---|----------|
| Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met. | |
| SC 1.0. Estuarine wetlands | |
| Does the wetland meet the following criteria for Estuarine wetlands? | |
| \square 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 | |
| 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? | Cat. I |
| □Yes = Category I □No - Go to SC 1.2 | |
| SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? | Cat. I |
| ☐ The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has | Cat. I |
| less than 10% cover of non-native plant species. (If non-native species are <i>Spartina</i> , see page 25) | |
| \Box At least $\%$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. | Cat. II |
| ☐ The wetland has at least two of the following features: tidal channels, depressions with open water, | |
| or contiguous freshwater wetlands. | |
| area category: | |
| 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? | |
| SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? | |
| http://www.dnr.wa.gov/NHPwetlandviewer | Cat. I |
| http://file.dnr.wa.gov/publications/amp_nh_wetlands_trs.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? | |
| SC 3.0. Bogs | |
| Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key</i> | |
| 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? \Box Yes – Go to SC 3.3 \boxtimes 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? $\square \text{Yes} - \text{Go to } \text{SC } 3.3 \square \text{No} = \text{Is not a bog}$ | |
| 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% | Cat. I |
| cover of plant species listed in Table 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 | |

| 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? <i>If you answer YES you will still need to rate the wetland based on its functions.</i> □ 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). | Cat. I |
| □Yes = Category I ⊠No = Not a forested wetland for this section | |
| SC 5.0. Wetlands in Coastal Lagoons | |
| Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? | |
| \Box 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 | Cat. I |
| bottom) | . |
| ☐ 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? | |
| \square The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has | Cat. II |
| less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). | |
| \Box At least $\frac{3}{4}$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | |
| un- mowed grassland. \Box 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: | Cat I |
| ☐ Long Beach Peninsula: Lands west of SR 103 | |
| ☐ Grayland-Westport: Lands west of SR 105 | |
| \square Ocean Shores-Copalis: Lands west of SR 115 and SR 109 | Cat. II |
| \square Yes – Go to SC 6.1 \square No = not an interdunal wetland for rating | Cat. II |
| 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)? \Box Yes = Category I \Box No – Go to SC 6.2 | Cat. III |
| 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 | |
| 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 |
| □ 1es - Category III □ NO - Category IV | |
| | |
| Category of wetland based on Special Characteristics | NΙΛ |
| If you answered No for all types, enter "Not Applicable" on Summary Form | NA |

Wetland name or number: Click here to enter text.

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RATING SUMMARY – Western Washington

Name of wetland (or ID #): NN Date of site visit: 1/13/2021

Rated by: <u>Jamie Sloan and Roen Hohlfeld</u> Trained by Ecology? ⊠Y □N Date of training: <u>9/2017</u>

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: Google Earth, Pierce County

OVERALL WETLAND CATEGORY (based on functions ⊠ or special characteristics □)

1. Category of wetland based on FUNCTIONS

- ☐ Category I Total score = 23 27
- ☐ Category III Total score = 16 19
- ☐ Category IV Total score = 9 15

| FUNCTION | Improving Water Quality | | Hydrologic | | Habitat | | | | | |
|--------------------------------|-------------------------|---|------------|----------|---------|----------|----------|---|---|-------|
| Circle the appropriate ratings | | | | | | | | | | |
| Site Potential | <u>H</u> | М | L | <u>H</u> | М | L | Н | M | L | |
| Landscape Potential | Н | М | <u>L</u> | Н | М | <u>L</u> | <u>H</u> | М | L | |
| Value | <u>H</u> | М | L | Н | М | L | <u>H</u> | М | L | TOTAL |
| Score Based on Ratings | | 7 | | | 7 | | | 8 | | 22 |

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 | | \boxtimes | |

Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

| Map of: | To answer questions: | Figure # |
|---|----------------------|----------|
| Cowardin plant classes | D 1.3, H 1.1, H 1.4 | 1 |
| Hydroperiods | D 1.4, H 1.2 | 2 |
| Location of outlet (can be added to map of hydroperiods) | D 1.1, D 4.1 | 2 |
| Boundary of area within 150 ft of the wetland (can be added to another figure) | D 2.2, D 5.2 | 2 |
| Map of the contributing basin | D 4.3, D 5.3 | 3 |
| 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 | 4 |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website) | D 3.1, D 3.2 | 5 |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web) | D 3.3 | 6 |

questions 1-7 apply, and go to Question 8.

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

| 1. | Are the water levels in the en | ire unit usually controlled by tides except during floods? |
|----|--|---|
| | ⊠ NO – go to 2 | \square YES – the wetland class is Tidal Fringe – go to 1.1 |
| 1 | 1.1 Is the salinity of the water o | uring periods of annual low flow below 0.5 ppt (parts per thousand)? |
| | | ied as a Freshwater Tidal Fringe use the forms for Riverine wetlands. If it an Estuarine wetland and is not scored. This method cannot be used to |
| 2. | | and precipitation is the only source (>90%) of water to it. Groundwater IOT sources of water to the unit. |
| | \boxtimes NO – go to 3 If your wetland can be classifi | \Box YES – The wetland class is Flats d as a Flats wetland, use the form for Depressional wetlands. |
| 3. | ☐ The vegetated part of the vegetated part | neet all of the following criteria? etland is on the shores of a body of permanent open water (without any time of the year) at least 20 ac (8 ha) in size; ter area is deeper than 6.6 ft (2 m). |
| | ⊠N0 – go to 4 | \square YES – The wetland class is Lake Fringe (Lacustrine Fringe) |
| 4. | ☑ The wetland is on a slope (☑ The water flows through the seeps. It may flow subsure | neet all of the following criteria? lope can be very gradual), we wetland in one direction (unidirectional) and usually comes from ace, as sheetflow, or in a swale without distinct banks, ad without being impounded. |
| | ⊠N0 – go to 5 | \square YES – The wetland class is Slope |
| | | t pond in these type of wetlands except occasionally in very small and hummocks (depressions are usually <3 ft diameter and less than 1 ft |
| 5. | ☐ The unit is in a valley, or st stream or river, | neet all of the following criteria? eam channel, where it gets inundated by overbank flooding from that rs at least once every 2 years. |
| | | |

| W | etland | name | or | number: | NN |
|---|--------|------|----|---------|----|
|---|--------|------|----|---------|----|

| | NO – go to 6NOTE: The Riverine unit can contain depressions flooding | ☐ YES – The wetland class is Riverine that are filled with water when the river is not |
|----|--|---|
| 6. | Is the entire wetland unit in a topographic depressurface, at some time during the year? <i>This mean of the wetland.</i> | sion in which water ponds, or is saturated to the as that any outlet, if present, is higher than the interior |
| | \square NO – go to 7 | $oxtimes \mathbf{YES}$ – The wetland class is Depressional |
| 7. | Is the entire wetland unit located in a very flat are flooding? The unit does not pond surface water maintained by high groundwater in the area. The outlet. | • |
| | □ NO – go to 8 | \square 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 | HGM class to | | |
|---------------------------------------|---------------|--|--|
| being rated | use in rating | | |
| Slope + Riverine | Riverine | | |
| Slope + Depressional | Depressional | | |
| Slope + Lake Fringe | Lake Fringe | | |
| Depressional + Riverine along stream | Depressional | | |
| within boundary of depression | | | |
| Depressional + Lake Fringe | Depressional | | |
| Riverine + Lake Fringe | Riverine | | |
| Salt Water Tidal Fringe and any other | Treat as | | |
| class of freshwater wetland | 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.

| DEPRESSIONAL AND FLATS WETLANDS | | | | | | | |
|---|------------------|---------|--|--|--|--|--|
| Water Quality Functions - Indicators that the site functions to improve water | er 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 (| | | | | | | |
| \square Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowin | points = 3 | 2 | | | | | |
| wedand has an intermittently nowing stream of aftern, orthighly constructed permanently nowin | points = 2 | 3 | | | | | |
| $\ \square$ 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 | s = 4 ⊠ No = 0 | 0 | | | | | |
| D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Coward | in classes): | | | | | | |
| ☑ Wetland has persistent, ungrazed, plants > 95% of area | points = 5 | | | | | | |
| \square Wetland has persistent, ungrazed, plants > 1/2 of area | points = 3 | 5 | | | | | |
| \square Wetland has persistent, ungrazed plants > 1/10 of area | points = 1 | | | | | | |
| ☐ Wetland has persistent, ungrazed plants < 1/10 of area | points = 0 | | | | | | |
| D 1.4. Characteristics of seasonal ponding or inundation: | | | | | | | |
| This is the area that is ponded for at least 2 months. See description in manual. | | | | | | | |
| | points = 4 | 4 | | | | | |
| ☐ Area seasonally ponded is > ¼ total area of wetland | points = 2 | | | | | | |
| ☐ Area seasonally ponded is < ¼ total area of wetland | points = 0 | | | | | | |
| Total for D 1 Add the points in the box | xes above | 12 | | | | | |
| Rating of Site Potential If score is: \square 12-16 = H \square 6-11 = M \square 0-5 = L Record the rating on the first | | | | | | | |
| 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? \Box Yes = | 1 ⊠ No = 0 | 0 | | | | | |
| D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? \Box Yes = | 1 ⊠ No = 0 | 0 | | | | | |
| D 2.3. Are there septic systems within 250 ft of the wetland? | 1 ⊠ No = 0 | 0 | | | | | |
| D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in | | 0 | | | | | |
| • | 1 ⊠ No = 0 | | | | | | |
| Total for D 2 Add the points in the box | xes above | 0 | | | | | |
| Rating of Landscape Potential If score is: $\square 3$ or $4 = H$ $\square 1$ or $2 = M$ $\boxtimes 0 = L$ Record the r | ating on the fir | st 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 | | 0 | | | | | |
| water that is on the 303(d) list? \square 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? \Box 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)? \square Yes = 2 \square No = 0 | | | | | | | |
| Total for D 3 Add the points in the box | xes above | 2 | | | | | |
| Rating of Value If score is: $\square 2-4 = H \square 1 = M \square 0 = L$ Record the rating on the firs | | | | | | | |

| DEPRESSIONAL AND FLATS WETLANDS | |
|---|--------------|
| Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation | ion |
| 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 | |
| \square Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently | 4 |
| flowing outlet. points = 2 | 4 |
| \square Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1 | |
| \square Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. points = 0 | |
| D 4.2. <u>Depth of storage during wet periods:</u> 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. | |
| \square 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. ☐ Marks of panding less than 0.5 ft (6 in) | |
| ☐ Marks of ponding less than 0.5 ft (6 in). points = 0 | |
| D 4.3. <u>Contribution of the wetland to storage in the watershed</u> : <i>Estimate the ratio of the area of upstream basin</i> | |
| contributing surface water to the wetland to the area of the wetland unit itself. | _ |
| oxinesq The area of the basin is less than 10 times the area of the unit. points = 5 $oxinesq$ The area of the basin is 10 to 100 times the area of the unit. points = 3 | 5 |
| ☐ 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 | |
| <u>'</u> | 42 |
| Total for D 4 Add the points in the boxes above Rating of Site Potential If score is: \boxtimes 12-16 = H \square 6-11 = M \square 0-5 = L Record the rating on the | 12 |
| | i jirst page |
| D 5.0. Does the landscape have the potential to support hydrologic functions of the site? | |
| D 5.1. Does the wetland receive stormwater discharges? ☐ Yes = 1 ☑ No = 0 | 0 |
| D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? \square Yes = 1 \square No = 0 | 0 |
| D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? | 0 |
| >1 residence/ac, urban, commercial, agriculture, etc.)? \Box Yes = 1 \boxtimes No = 0 Total for D 5 Add the points in the boxes above | 0 |
| Rating of Landscape Potential If score is: $\square 3 = H$ $\square 1$ or $2 = M$ $\boxtimes 0 = L$ Record the rating on the | |
| Rating of Landscape Potential II score is: □3 = H □1 or 2 = M ⊠0 = L Record the rating on the | r jirst page |
| D 6.0. Are the hydrologic functions provided by the site valuable to society? | |
| D 6.1. The unit is in a landscape that has flooding problems. Choose the description that best matches conditions around | |
| the wetland unit being rated. Do not add points. <u>Choose the highest score if more than one condition is met</u> . | |
| The wetland captures surface water that would otherwise flow down-gradient into areas where flooding has | |
| damaged human or natural resources (e.g., houses or salmon redds): | |
| • 🖂 Flooding occurs in a sub-basin that is immediately down-gradient of unit. points = 2 | |
| Surface flooding problems are in a sub-basin farther down-gradient. Plooding from groundwater is an issue in the sub-basin. points = 1 | 2 |
| | |
| 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? | 0 |
| □Yes = 2 ⊠ No = 0 | 0 |
| Total for D 6 Add the points in the boxes above | 2 |
| | |

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 1 ☐ Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1 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 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 1 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 H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle 1 If you counted: \square > 19 species points = 2 points = 1 \Box < 5 species points = 0 H 1.4. Interspersion of habitats Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. If you have four or more plant classes or three classes and open water, the rating is always high. 0 **None** = 0 points ☐ **Moderate** = 2 points \square Low = 1 point All three diagrams in this row are ☐ **HIGH** = 3points

| 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. Undercrub 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 for 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 beover or muskrate 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 3 a col thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibions). Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata). Add the points in the boxes above 7 | H 1 E. Special habitat features: | | | | | | |
|--|--|--|----------------|--|--|--|--|
| 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 for 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 X a col thin stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-loying 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). Total for H | · · | of chacks is the number of points | | | | | |
| Standing snags (dbh > 4 in) within the wetland. Undercut banks are present for at least 6.6 ft (2 m) AND/OR overhanging plants extends at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 53 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 X ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-loying by amphibians). Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of stratos). Total for H 1 | | | | | | | |
| 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 hove not yet weathered where wood is exposed!). At least 1% ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg doying by amphibions). Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata). Total for H 1 | 1 | ι 6 π long). | | | | | |
| 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 share 25% of the wetland area in every stratum of plants (see H 1.1 for list of strato). Add the points in the boxes above 7 | 1 | | | | | | |
| Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>). At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally invandated (<i>structures for egg-laying by amphibians</i>). Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>). Total for H 1 | | | | | | | |
| slope) OR signs of recent beaver activity are present (cut shrubs or trees that have not yet weathered where wood is exposed). At least X ac of thin stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by omphibians). Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata). Total for H 1 Add the points in the boxes above 7 Rating of Site Potential If score is: 15-18 = H | | | 4 | | | | |
| ## At least % ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by emphibians). Invasive plants cover less than 25% of the wetland area in every stratum of plants (see # 1.1 for list of stratus). Total for H 1 | <u> </u> | | 4 | | | | |
| At least % ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibions). Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strato). Total for H 1 Add the points in the boxes above 7 Rating of Site Potential if score is: 15-18 = H \(\tilde{8}\) 7-14 = M \(\tilde{0}\) 6-6 = L \(\tilde{8}\) 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). Caclulate: % undisturbed habitat + [(\(\tilde{8}\) moderate and low intensity land uses)/2] = 41.5% + (13/2) = 41.75% If total accessible habitat is: \(\tilde{8}\) Moderate and low intensity land uses)/2] = 41.5% + (13/2) = 41.75% If total accessible habitat is: \(\tilde{8}\) Moderate and low intensity land uses)/2] = 41.5% + (13/2) = 41.75% If total accessible habitat in 1 km Polygon | | trees that have not yet weathered | | | | | |
| 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 strato). Total for H 1 | | ro procent in areas that are | | | | | |
| Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata). Total for H 1 | <u> </u> | • | | | | | |
| Total for H 1 Total for H 1 Total of H 2.0. Does the landscape have the potential to support the habitat functions of the site? 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 + [(%moderate and low intensity land uses)/2] = 41.5% + (1½/2) = 41.75% If total accessible habitat is: A > 1/3 (33.3%) of 1 km Polygon Doints = 3 Doints = 2 Doints = 0 Doints = 1 Doints = 2 Doints = 2 Doints = 2 Doints = 3 Add the points in the boxes above because the first page and the wetland. Calculate: % undisturbed habitat in 1 km Polygon around the wetland. Calculate: % undisturbed habitat in 1 km Polygon around the wetland. Calculate: % undisturbed habitat in 1 km Polygon around the wetland. Calculate: % undisturbed habitat 10-50% and in 1-3 patches points = 3 Undisturbed habitat 10-50% and > 3 patches points = 1 Undisturbed habitat 10-50% and > 3 patches points = 1 Undisturbed habitat 10-50% and > 3 patches points = 0 H 2.3. Land uses intensity in 1 km Polygon: If points = 0 Add the points in the boxes above because in the polygon is high intensity land use points = (-2) Sook of 1 km Polygon is high intensity land use points = (-2) Total for H 2 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 dapplies to the wetland being rated. Site meets ANY of the following criteria: It it is a Metland of High Conservation Value as determined by the Department of Natural Resources it 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 does not meet any of the criteria above | | | | | | | |
| Total for H 1 | · · | uni or plants (see II 1.1 Joi list of | | | | | |
| 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 + [(%moderate and low intensity land uses)/2] = 41.5% + (1%/2) = 41.75% If total accessible habitat is: | · · · · · · · · · · · · · · · · · · · | Add the points in the boxes above | 7 | | | | |
| H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit). Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2] = 41.5% + (1%/2) = 41.75% If total accessible habitat is: > 1/3 (33.3%) of 1 km Polygon | Rating of Site Potential If score is: \Box 15-18 = H \boxtimes 7-14 = M \Box 0-6 = L | Record the rating on t | the first page | | | | |
| H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit). Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2] = 41.5% + (1%/2) = 41.75% If total accessible habitat is: > 1/3 (33.3%) of 1 km Polygon | H 2.0. Does the landscape have the potential to support the habitat fund | rtions of the site? | | | | | |
| Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2] = 41.5% + (1%/2) = 41.75% | i i ii | I I | | | | | |
| If total accessible habitat is: | | (cos)/2] = 41 E9/ + (19/ /2) = 41 7E9/ | | | | | |
| S > 1/3 (33.3%) of 1 km Polygon | | (Ses)/2] = 41.5% + (1%/2) =41.75% | | | | | |
| 20-33% of 1 km Polygon | | | | | | | |
| 10-19% of 1 km Polygon | | · | 3 | | | | |
| < 10% of 1 km Polygon | | - | | | | | |
| H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2 = 91.5 % + (5.5%/2) = 94.25% Undisturbed habitat > 50% of Polygon Doints = 3 Doints = 2 Doints = 1 Doints = 0 Doints = 1 Doints = 1 Doints = 1 Doints = 0 Doints = 1 Doints = 0 Doints = 0 Doints = 0 Doints = 1 Doints = 0 Doints = | | - | | | | | |
| Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2 = 91.5 % + (5.5%/2) = 94.25% ☐ Undisturbed habitat > 50% of Polygon ☐ Undisturbed habitat 10-50% and in 1-3 patches ☐ Undisturbed habitat 10-50% and > 3 patches ☐ Undisturbed habitat 10-50% and > 3 patches ☐ Undisturbed habitat < 10% of 1 km Polygon ☐ Depoints = 0 ☐ Undisturbed habitat < 10% of 1 km Polygon ☐ Points = 0 ☐ Undisturbed habitat > 50% of 1 km Polygon is high intensity land use ☐ Soo | ☐ < 10% of 1 km Polygon | points = 0 | | | | | |
| Undisturbed habitat > 50% of Polygon | · - | | | | | | |
| Undisturbed habitat 10-50% and in 1-3 patches Undisturbed habitat 10-50% and > 3 patches Undisturbed habitat < 10% of 1 km Polygon H 2.3. Land use intensity in 1 km Polygon: If So% of 1 km Polygon is high intensity land use Points = 0 Total for H 2 Add the points in the boxes above Rating of Landscape Potential If score is: S4-6 = H S1-3 = M S-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: Dit is an ormore 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 an 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 Site does not meet any of the criteria above Doints = 0 | Calculate: % undisturbed habitat + [(%moderate and low intensity land u | ses)/2 = 91.5 % + (5.5%/2) = 94.25% | | | | | |
| Undisturbed habitat 10-50% and in 1-3 patches Undisturbed habitat 10-50% and > 3 patches Undisturbed habitat 10-50% and > 3 patches Undisturbed habitat < 10% of 1 km Polygon H 2.3. Land use intensity in 1 km Polygon is high intensity land use > 50% of 1 km Polygon is high intensity land use > 50% of 1 km Polygon is high intensity Doints = 0 Total for H 2 Add the points in the boxes above Rating of Landscape Potential If score is: | ☑ Undisturbed habitat > 50% of Polygon | points = 3 | 3 | | | | |
| Undisturbed habitat < 10% of 1 km Polygon H 2.3. Land use intensity in 1 km Polygon: If □ > 50% of 1 km Polygon is high intensity land use □ 50% of 1 km Polygon is high intensity □ > 50% of 1 km Polygon is high intensity □ 50% of 1 km Polygon is high intensity □ 50% of 1 km Polygon is high intensity □ points = 0 Total for H 2 Add the points in the boxes above 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: □ 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 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 □ Site does not meet any of the criteria above points = 0 | \square Undisturbed habitat 10-50% and in 1-3 patches | points = 2 | 3 | | | | |
| H 2.3. Land use intensity in 1 km Polygon: If □ > 50% of 1 km Polygon is high intensity land use □ > 50% of 1 km Polygon is high intensity □ > 50% of 1 km Polygon is high intensity □ points = 0 Total for H 2 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: □ 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 any ped as a location for an individual WDFW priority species □ 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 □ Site does not meet any of the criteria above Distriction Din terminal transfersource Distriction Distriction Distriction | \square Undisturbed habitat 10-50% and > 3 patches | points = 1 | | | | | |
| □ > 50% of 1 km Polygon is high intensity land use □ > 50% of 1 km Polygon is high intensity □ points = 0 Total for H 2 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: □ 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 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 □ Site does not meet any of the criteria above Doints = 0 | ☐ Undisturbed habitat < 10% of 1 km Polygon | points = 0 | | | | | |
| Total for H 2 Rating of Landscape Potential If score is: ## 3.0. Is the habitat provided by the site valuable to society? ## 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: 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 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 Site does not meet any of the criteria above points = 0 | H 2.3. Land use intensity in 1 km Polygon: If | | | | | | |
| Total for H 2 Rating of Landscape Potential If score is: | $\square >$ 50% of 1 km Polygon is high intensity land use | points = (- 2) | 0 | | | | |
| Rating of Landscape Potential If score is: | ≤ 50% of 1 km Polygon is high intensity | points = 0 | | | | | |
| 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 | Total for H 2 | Add the points in the boxes above | 6 | | | | |
| 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 ☐ Site does not meet any of the criteria above points = 0 | Rating of Landscape Potential If score is: $\square 4-6 = H \square 1-3 = M \square < 1 = L$ | Record the rating on th | e first page | | | | |
| 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 □ Site does not meet any of the criteria above points = 0 | H 3.0. Is the habitat provided by the site valuable to society? | | | | | | |
| 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 | H 3.1. Does the site provide habitat for species valued in laws, regulations, or po | olicies? Choose only the highest score | | | | | |
| ☑ 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 ☐ Site does not meet any of the criteria above | · · · · · · · · · · · · · · · · · · · | , - | | | | | |
| □ 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 □ Site does not meet any of the criteria above | Site meets ANY of the following criteria: | points = 2 | | | | | |
| □ 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 □ Site does not meet any of the criteria above | ☑ It has 3 or more priority habitats within 100 m (see next page) | | | | | | |
| □ 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 | \square It provides habitat for Threatened or Endangered species (any pla | ant or animal on the state or federal lists) | | | | | |
| □ 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 | $\hfill\Box$ It is mapped as a location for an individual WDFW priority specie | s | 2 | | | | |
| in a Shoreline Master Plan, or in a watershed plan ☐ Site has 1 or 2 priority habitats (listed on next page) within 100 m ☐ Site does not meet any of the criteria above points = 0 | <u>-</u> | | | | | | |
| ☐ Site has 1 or 2 priority habitats (listed on next page) within 100 m ☐ Site does not meet any of the criteria above points = 0 | = ' ' | regional comprehensive plan, | | | | | |
| ☐ Site does not meet any of the criteria above points = 0 | · | | | | | | |
| | | • | | | | | |
| | · | • | | | | | |

Rating of Value If score is: $\boxtimes 2 = H \square 1 = M \square 0 = L$

Record the rating on the first page

WDFW Priority Habitats

<u>Priority habitats listed by WDFW</u> (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). |
|---|
| \boxtimes Biodiversity Areas and Corridors : Areas of habitat that are relatively important to various species of native fish and wildlife (<i>full descriptions in WDFW PHS report</i>). |
| \square Herbaceous Balds: Variable size patches of grass and forbs on shallow soils over bedrock. |
| \boxtimes Old-growth/Mature forests: <u>Old-growth west of Cascade crest</u> – 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. <u>Mature forests</u> – 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 (<i>full descriptions in WDFW PHS report p. 158 – see web link above</i>). |
| \square 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 (<i>full descriptions in WDFW PHS report p. 161 – see web link above</i>). |
| \square 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). |
| \Box 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. |
| \Box Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation. |
| \Box Talus: Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, and or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs. |
| \boxtimes 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.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

| Wetland Type | Category |
|--|----------|
| Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met. | |
| SC 1.0. Estuarine wetlands | |
| Does the wetland meet the following criteria for Estuarine wetlands? | |
| \square 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 | |
| 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? | Cat. I |
| \Box Yes = Category I \Box No - Go to SC 1.2 | Cut. 1 |
| | |
| SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? | Cat. I |
| ☐ The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has | Cat. i |
| less than 10% cover of non-native plant species. (If non-native species are <i>Spartina</i> , see page 25) | |
| \square At least $lpha$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | Cat. II |
| un- mowed grassland. | Cat. II |
| \square 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 | |
| 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? | |
| — | |
| SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? | |
| http://www.dnr.wa.gov/NHPwetlandviewer □Yes = Category I □No = Not a WHCV | Cat. I |
| SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? | |
| http://file.dnr.wa.gov/publications/amp_nh_wetlands_trs.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? | |
| <u> </u> | |
| 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? \Box Yes – Go to SC 3.3 \boxtimes 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? \Box Yes – Go to SC 3.3 \boxtimes 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% | Cat. I |
| 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 | |

| 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? <i>If you answer YES you will still need to rate the wetland based on its functions.</i> □ 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). | Cat. I |
| □Yes = Category I ⊠No = Not a forested wetland for this section | |
| 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) ☐ 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). ☐ At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. ☐ The wetland is larger than ¹/₁₀ ac (4350 ft²) ☐ Yes = Category I ☐ No = Category II | Cat. 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 Ocean Shores-Copalis: Lands west of SR 115 and SR 109 Yes – Go to SC 6.1 No = not an interdunal wetland for rating | Cat I Cat. II |
| 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)? 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 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. III Cat. IV |
| Category of wetland based on Special Characteristics If you answered No for all types, enter "Not Applicable" on Summary Form | NA |

Wetland name or number: Click here to enter text.

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RATING SUMMARY – Western Washington

Name of wetland (or ID #): YY Date of site visit: 4/20/2021

Rated by: Jamie Sloan and Roen Hohlfeld Trained by Ecology? ⊠Y □N Date of training: 9/2017

HGM Class used for rating: <u>Depressional</u> 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: Google Earth, Pierce County

OVERALL WETLAND CATEGORY (based on functions ⊠ or special characteristics □)

1. Category of wetland based on FUNCTIONS

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

| FUNCTION | Improving Water Quality | | | Hydrologic | | Habitat | | | | |
|------------------------|-------------------------|---|----------|------------|----------|----------|----------|----------|----------|-------|
| | | | | | Circle t | the app | propr | iate ra | tings | |
| Site Potential | Н | M | L | Н | M | L | Н | М | <u>L</u> | |
| Landscape Potential | Н | М | <u>L</u> | Н | М | <u>L</u> | <u>H</u> | М | L | |
| Value | <u>H</u> | М | L | <u>H</u> | М | L | Н | <u>M</u> | L | TOTAL |
| Score Based on Ratings | | 6 | | | 6 | | | 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 | | \boxtimes |

Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

| Map of: | To answer questions: | Figure # |
|---|----------------------|----------|
| Cowardin plant classes | D 1.3, H 1.1, H 1.4 | 1 |
| Hydroperiods | D 1.4, H 1.2 | 2 |
| Location of outlet (can be added to map of hydroperiods) | D 1.1, D 4.1 | 2 |
| Boundary of area within 150 ft of the wetland (can be added to another figure) | D 2.2, D 5.2 | 2 |
| Map of the contributing basin | D 4.3, D 5.3 | 3 |
| 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 | 4 |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website) | D 3.1, D 3.2 | 5 |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web) | D 3.3 | 6 |

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 | l by tides except during floods? |
|----|--|---|--|
| | ⊠N0 – go to 2 | □ YES – the w | etland class is Tidal Fringe – go to 1.1 |
| 1 | 1.1 Is the salinity of the water | r during periods of annual lo | w flow below 0.5 ppt (parts per thousand)? |
| | | ssified as a Freshwater Tidal t is an Estuarine wetland an | YES – Freshwater Tidal Fringe Fringe use the forms for Riverine wetlands. If is not scored. This method cannot be used to |
| 2. | | lat and precipitation is the or re NOT sources of water to th | nly source (>90%) of water to it. Groundwate ne unit. |
| | \boxtimes NO – go to 3 If your wetland can be class. | ified as a Flats wetland, use ti | \square YES – The wetland class is Flats he form for Depressional wetlands. |
| 3. | ☐ The vegetated part of the plants on the surface at a | it meet all of the following c wetland is on the shores of any time of the year) at least water area is deeper than 6. | a body of permanent open water (without any 20 ac (8 ha) in size; |
| | ⊠ N0 – go to 4 | \square YES – The wetland cla | ass is Lake Fringe (Lacustrine Fringe) |
| 4. | ⊠The wetland is on a slope ⊠The water flows through seeps. It may flow subst | it meet all of the following c e (<i>slope can be very gradual</i>), the wetland in one direction urface, as sheetflow, or in a s tland without being impou n | u (unidirectional) and usually comes from wale without distinct banks, |
| | \boxtimes NO – go to 5 | | \square YES – The wetland class is Slope |
| | | | etlands except occasionally in very small and s are usually <3 ft diameter and less than 1 ft |
| 5. | ☐ The unit is in a valley, or stream or river, | it meet all of the following c stream channel, where it get ccurs at least once every 2 ye | s inundated by overbank flooding from that |

| Wetland name or number: Y | W | /etland | name | or | number: | YY |
|---------------------------|---|---------|------|----|---------|----|
|---------------------------|---|---------|------|----|---------|----|

| | NO – go to 6NOTE: The Riverine unit can contain depressions flooding | ☐ YES – The wetland class is Riverine s that are filled with water when the river is not |
|----|--|--|
| 6. | Is the entire wetland unit in a topographic depressurface, at some time during the year? <i>This mean of the wetland.</i> | ssion in which water ponds, or is saturated to the ns that any outlet, if present, is higher than the interior |
| | \square NO – go to 7 | ⊠YES – The wetland class is Depressional |
| 7. | Is the entire wetland unit located in a very flat are flooding? The unit does not pond surface water r maintained by high groundwater in the area. The outlet. | • |
| | □NO – go to 8 | \square 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 | HGM class to |
|---------------------------------------|---------------|
| being rated | use in rating |
| Slope + Riverine | Riverine |
| Slope + Depressional | Depressional |
| Slope + Lake Fringe | Lake Fringe |
| Depressional + Riverine along stream | Depressional |
| within boundary of depression | |
| Depressional + Lake Fringe | Depressional |
| Riverine + Lake Fringe | Riverine |
| Salt Water Tidal Fringe and any other | Treat as |
| class of freshwater wetland | 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.

| DEPRESSIONAL AND FLATS WETLANDS | | |
|--|------------------|-----------|
| Water Quality Functions - Indicators that the site functions to improve water | er 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 (| | |
| \square Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowin | points = 3 | 2 |
| Wettand has an intermittently nowing stream of ditch, OK nightly constricted permanently nowing | points = 2 | 3 |
| $\ \square$ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. | points = 1 | |
| $\ \square$ 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 | s = 4 ⊠ No = 0 | 0 |
| D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Coward | in classes): | |
| ☑ Wetland has persistent, ungrazed, plants > 95% of area | points = 5 | |
| \square Wetland has persistent, ungrazed, plants > 1/2 of area | points = 3 | 5 |
| \square Wetland has persistent, ungrazed plants > 1/10 of area | points = 1 | |
| \square 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. | | |
| \square Area seasonally ponded is > $\frac{1}{2}$ total area of wetland | points = 4 | 0 |
| ☐ Area seasonally ponded is > ¼ total area of wetland | points = 2 | |
| ☑ Area seasonally ponded is < ¼ total area of wetland ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ | points = 0 | |
| Total for D 1 Add the points in the box | xes above | 8 |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 0-5 = L Record the | rating on the f | irst 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? \Box Yes = | 1 ⊠ No = 0 | 0 |
| D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? \Box Yes = | 1 ⊠ No = 0 | 0 |
| D 2.3. Are there septic systems within 250 ft of the wetland? \Box Yes = | 1 ⊠ No = 0 | 0 |
| D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in | | 0 |
| · | 1 ⊠ No = 0 | |
| Total for D 2 Add the points in the box | xes above | 0 |
| Rating of Landscape Potential If score is: $\square 3$ or $4 = H$ $\square 1$ or $2 = M$ $\boxtimes 0 = L$ Record the r | ating on the fir | st 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 | | 0 |
| water that is on the 303(d) list? \square 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? \Box 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)? $	extstyle 	extstyle $ | 2 □ No = 0 | 2 |
| Total for D 3 Add the points in the box | xes above | 2 |
| Rating of Value If score is: $\square 2-4 = H \square 1 = M \square 0 = L$ Record the | rating on the f | irst page |

| DEPRESSIONAL AND FLATS WETLANDS | | | |
|--|------------|--|--|
| Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation | | | |
| D 4.0. Does the site have the potential to reduce flooding and erosion? | | | |
| D 4.1. Characteristics of surface water outflows from the wetland: ☐ Wetland is a depression or flat depression with no surface water leaving it (no outlet). points = 4 ☐ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. points = 2 ☐ Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1 ☐ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. points = 0 | 4 | | |
| D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part. □ Marks of ponding are 3 ft or more above the surface or bottom of outlet. □ Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet. □ Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet. □ The wetland is a "headwater" wetland. □ Wetland is flat but has small depressions on the surface that trap water. □ Marks of ponding less than 0.5 ft (6 in). | 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. □ The area of the basin is 10 to 100 times the area of the unit. □ The area of the basin is more than 100 times the area of the unit. □ Entire wetland is in the Flats class. | 5 | | |
| Total for D 4 Add the points in the boxes above | 9 | | |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 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? \square Yes = 1 \square No = 0 | 0 | | |
| D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? \square Yes = 1 \square No = 0 | 0 | | |
| D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? \square Yes = 1 \square No = 0 | 0 | | |
| Total for D 5 Add the points in the boxes above | 0 | | |
| Rating of Landscape Potential If score is: $\Box 3 = H$ $\Box 1$ or $2 = M$ $\boxtimes 0 = L$ 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 ■ □ 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. | 2 | | |
| D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? | 0 | | |
| | | | |
| Litoral for Dip. Add the noints in the boxes above | 2 | | |

| 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 | 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 | 1 |
| H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle If you counted: | 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 All three diagrams in this row are □ HIGH = 3points | 0 |

| H 1.5. Special habitat features: | | |
|--|--|---------------|
| Check the habitat features that are present in the wetland. The number of | of checks is the number of points. | |
| ☑ Large, downed, woody debris within the wetland (> 4 in diameter and | l 6 ft long). | |
| Standing snags (dbh > 4 in) within the wetland. ■ The standing snags (dbh > 4 in) within the wetland. ■ The stan | | |
| ☐ Undercut banks are present for at least 6.6 ft (2 m) AND/OR overhan | ging plants extends at least 3.3 ft (1 m) | |
| over a stream (or ditch) in, or contiguous with the wetland, for at least | | |
| ☐ Stable steep banks of fine material that might be used by beaver or | - | 3 |
| slope) OR signs of recent beaver activity are present (cut shrubs or | | |
| where wood is exposed). | area mar mare mer yet meannered | |
| ☐ At least ¼ ac of thin-stemmed persistent plants or woody branches ar | e present in areas that are | |
| permanently or seasonally inundated (structures for egg-laying by an | - | |
| | | |
| strata). | o. p.a (555 // 212 jo/ 1155 e) | |
| Total for H 1 | Add the points in the boxes above | 6 |
| | | |
| Rating of Site Potential If score is: \Box 15-18 = H \Box 7-14 = M \boxtimes 0-6 = L | Record the rating on t | ne jirst page |
| H 2.0. Does the landscape have the potential to support the habitat fund | tions of the site? | |
| H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>). | | |
| Calculate: % undisturbed habitat + [(%moderate and low intensity land u | ses)/2] = 52% + (1%/2) = 52.5% | |
| If total accessible habitat is: | | |
| | points = 3 | 3 |
| ☐ 20-33% of 1 km Polygon | points = 2 | _ |
| ☐ 10-19% of 1 km Polygon | points = 1 | |
| | - | |
| ☐ < 10% of 1 km Polygon | points = 0 | |
| H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. | \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | |
| Calculate: % undisturbed habitat + [(%moderate and low intensity land u | | |
| ☐ Undisturbed habitat > 50% of Polygon | points = 3 | 3 |
| ☐ Undisturbed habitat 10-50% and in 1-3 patches | points = 2 | J |
| \square Undisturbed habitat 10-50% and > 3 patches | points = 1 | |
| \square Undisturbed habitat < 10% of 1 km Polygon | points = 0 | |
| H 2.3. Land use intensity in 1 km Polygon: If | | |
| ☐ > 50% of 1 km Polygon is high intensity land use | points = (- 2) | 0 |
| | points = 0 | |
| Total for H 2 | Add the points in the boxes above | 6 |
| Rating of Landscape Potential If score is: $\boxtimes 4-6 = H \square 1-3 = M \square < 1 = L$ | Record the rating on th | _ |
| | | - J C. p g . |
| 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 po | licies? Choose only the highest score | |
| that applies to the wetland being rated. | | |
| Site meets ANY of the following criteria: | points = 2 | |
| \Box It has 3 or more priority habitats within 100 m (see next page) | | |
| ☐ It provides habitat for Threatened or Endangered species (any pla | ant or animal on the state or federal lists) | |
| \square It is mapped as a location for an individual WDFW priority species | | 1 |
| \square It is a Wetland of High Conservation Value as determined by the I | Department of Natural Resources | |
| $\ \square$ It has been categorized as an important habitat site in a local or r | egional comprehensive plan, | |
| in a Shoreline Master Plan, or in a watershed plan | | |
| oxtimes Site has 1 or 2 priority habitats (listed on next page) within 100 m | points = 1 | |
| $\ \square$ Site does not meet any of the criteria above | points = 0 | |
| | | |

Rating of Value If score is: $\Box 2 = H \boxtimes 1 = M \Box 0 = L$

Record the rating on the first page

WDFW Priority Habitats

<u>Priority habitats listed by WDFW</u> (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.

| \square 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 (<i>full descriptions in WDFW PHS report</i>). |
| \square 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 (<i>full descriptions in WDFW PHS report p. 158 – see web link above</i>). |
| \square 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 (<i>full descriptions in WDFW PHS report p. 161 – see web link above</i>). |
| ☐ 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. (<i>full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page</i>). |
| \Box 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. |
| \Box Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation. |
| \Box Talus: Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, 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.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

| Wetland Type | Category |
|--|----------|
| Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met. | |
| SC 1.0. Estuarine wetlands | |
| Does the wetland meet the following criteria for Estuarine wetlands? | |
| \square The dominant water regime is tidal, | |
| \square Vegetated, and | |
| ☐ With a salinity greater than 0.5 ppt ☐ Yes –Go to SC 1.1 ☒ No= Not an estuarine wetland | |
| 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? | Cat. I |
| $\Box Yes = \textbf{Category I} \qquad \Box No - Go to \textbf{SC 1.2}$ | |
| SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? | |
| \square The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has | Cat. I |
| less than 10% cover of non-native plant species. (If non-native species are Spartina, see page 25) | |
| \square At least $lpha$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | Cat. II |
| un- mowed grassland. | Cat. II |
| ☐ The wetland has at least two of the following features: tidal channels, depressions with open water, | |
| or contiguous freshwater wetlands. \square Yes = Category I \square No= Category 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? $	extstyle 	ext$ | |
| SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? | |
| $\underline{\text{http://www.dnr.wa.gov/NHPwetlandviewer}} \qquad \qquad \Box \text{Yes} = \textbf{Category I} \qquad \boxtimes \text{No} = \textbf{Not a WHCV}$ | Cat. I |
| SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? | Cuti |
| http://file.dnr.wa.gov/publications/amp_nh_wetlands_trs.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? | |
| <u> </u> | |
| SC 3.0. Bogs Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key</i> | |
| 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? \Box Yes – Go to SC 3.3 \boxtimes 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? \Box Yes – Go to SC 3.3 \boxtimes 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% | Cat. I |
| cover of plant species listed in Table 4? \Box Yes = Is a Category I bog \Box 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 | |

| 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? <i>If you answer YES you will still need to rate the wetland based on its functions.</i> □ 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). | Cat. I |
| ☐Yes = Category I ☐No = Not a forested wetland for this section | |
| SC 5.0. Wetlands in Coastal Lagoons | |
| Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? | |
| \Box 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 | Cat. I |
| bottom) | . |
| ☐ 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? | |
| \square The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has | Cat. II |
| less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). | |
| \square At least $rac{3}{4}$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | |
| un- mowed grassland. \Box 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: | Cat I |
| ☐ Long Beach Peninsula: Lands west of SR 103 | |
| ☐ Grayland-Westport: Lands west of SR 105 | |
| \square Ocean Shores-Copalis: Lands west of SR 115 and SR 109 | Cat. II |
| \square Yes – Go to SC 6.1 \square No = not an interdunal wetland for rating | Cat. II |
| 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)? \Box Yes = Category I \Box No – Go to SC 6.2 | Cat. III |
| 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 | |
| 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 |
| Tes - Category III LINO - Category IV | |
| | |
| Category of wetland based on Special Characteristics | NI A |
| If you answered No for all types, enter "Not Applicable" on Summary Form | NA |

Wetland name or number: Click here to enter text.

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RATING SUMMARY – Western Washington

Name of wetland (or ID #): ZZ Date of site visit: 8/9/2021

Rated by: <u>Jamie Sloan and Roen Hohlfeld</u> Trained by Ecology? \boxtimes Y \square N Date of training: <u>9/2017</u>

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: Google Earth, Pierce County

OVERALL WETLAND CATEGORY (based on functions ⊠ or special characteristics □)

1. Category of wetland based on FUNCTIONS

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

| FUNCTION | | mprov ter Q | ing uality | Hy | ydrolo | gic | | Habita | at | |
|------------------------|----------|----------------|---------------|----------|--------|----------|----------|---------|-------|-------|
| | | | | | Circle | the ap | propr | iate ra | tings | |
| Site Potential | Н | M | L | Н | М | L | Н | M | L | |
| Landscape Potential | Н | M | L | Н | М | <u>L</u> | <u>H</u> | М | L | |
| Value | <u>H</u> | М | L | <u>H</u> | М | L | <u>H</u> | М | L | TOTAL |
| Score Based on Ratings | | 7 | | | 5 | | | 8 | | 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 | CATI | EGORY |
|------------------------------------|------|-------------|
| 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 | | \boxtimes |

Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

| Map of: | To answer questions: | Figure # |
|---|----------------------|----------|
| Cowardin plant classes | D 1.3, H 1.1, H 1.4 | 1 |
| Hydroperiods | D 1.4, H 1.2 | 2 |
| Location of outlet (can be added to map of hydroperiods) | D 1.1, D 4.1 | 2 |
| Boundary of area within 150 ft of the wetland (can be added to another figure) | D 2.2, D 5.2 | 2 |
| Map of the contributing basin | D 4.3, D 5.3 | 3 |
| 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 | 4 |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website) | D 3.1, D 3.2 | 5 |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web) | D 3.3 | 6 |

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 uni | t usually controlled by tides except during floods? |
|----|---|--|
| | ⊠ NO – go to 2 | \square YES – the wetland class is Tidal Fringe – go to 1.1 |
| 1 | 1.1 Is the salinity of the water during p | periods of annual low flow below 0.5 ppt (parts per thousand)? |
| | | a Freshwater Tidal Fringe use the forms for Riverine wetlands. If it tuarine wetland and is not scored. This method cannot be used to |
| 2. | The entire wetland unit is flat and prand surface water runoff are NOT so | recipitation is the only source (>90%) of water to it. Groundwater urces of water to the unit. |
| | \boxtimes NO – go to 3 If your wetland can be classified as a R | \Box YES – The wetland class is Flats Flats wetland, use the form for Depressional wetlands. |
| 3. | | is on the shores of a body of permanent open water (without any of the year) at least 20 ac (8 ha) in size; |
| | ⊠NO - go to 4 □ YE | ES - The wetland class is Lake Fringe (Lacustrine Fringe) |
| 4. | | an be very gradual), and in one direction (unidirectional) and usually comes from sheetflow, or in a swale without distinct banks, |
| | ⊠NO – go to 5 | \square YES – The wetland class is Slope |
| | | in these type of wetlands except occasionally in very small and mocks (depressions are usually <3 ft diameter and less than 1 ft |
| 5. | Does the entire wetland unit meet al ☐ The unit is in a valley, or stream che stream or river, ☐ The overbank flooding occurs at le | nannel, where it gets inundated by overbank flooding from that |

| Wetland name or number | :: |
|------------------------|----|
|------------------------|----|

| | NO – go to 6 NOTE : The Riverine unit can contain depressions flooding | ☐ YES – The wetland class is Riverine sthat are filled with water when the river is not |
|----|--|--|
| 6. | Is the entire wetland unit in a topographic depressurface, at some time during the year? <i>This mean of the wetland.</i> | ssion in which water ponds, or is saturated to the as that any outlet, if present, is higher than the interior |
| | \square NO – go to 7 | $oxtimes \mathbf{YES}$ – The wetland class is Depressional |
| 7. | Is the entire wetland unit located in a very flat are flooding? The unit does not pond surface water maintained by high groundwater in the area. The outlet. | • |
| | \square NO – go to 8 | \square 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 | Depressional |
| within boundary of depression | |
| Depressional + Lake Fringe | Depressional |
| Riverine + Lake Fringe | Riverine |
| Salt Water Tidal Fringe and any other | Treat as |
| class of freshwater wetland | 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.

| <u>DEPRESSIONAL AND FLATS WETLANDS</u> 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 (☐ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing. ☐ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. ☐ Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions). ☐ Yes | points = 3 ag outlet. points = 2 points = 1 points = 1 | 0 | | |
| D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Coward Wetland has persistent, ungrazed, plants > 95% of area ☐ Wetland has persistent, ungrazed, plants > 1/2 of area ☐ Wetland has persistent, ungrazed plants > 1/10 of area ☐ Wetland has persistent, ungrazed plants < 1/10 of area | din classes): points = 5 points = 3 points = 1 points = 0 | 5 | | |
| 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 ☐ Area seasonally ponded is > ¼ total area of wetland ☐ Area seasonally ponded is < ¼ total area of wetland | points = 4 points = 2 points = 0 | 0 | | |
| Total for D 1 Add the points in the bo | xes above | 6 | | |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 0-5 = L Record the | e rating on the f | ïrst 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? | 1 ⊠ No = 0 | 0 | | |
| D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? \Box Yes = | 1 ⊠ No = 0 | 0 | | |
| D 2.3. Are there septic systems within 250 ft of the wetland? \Box 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: Horse manure | 1 □ No = 0 | 1 | | |
| Total for D 2 Add the points in the bo | xes above | 1 | | |
| Rating of Landscape Potential If score is: $\square 3$ or $4 = H$ $\boxtimes 1$ or $2 = M$ $\square 0 = L$ Record the in | rating on the fir | st 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? \Box 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? \Box 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 \[\text{No} = 0 | 2 | | |
| Total for D 3 Add the points in the bo | xes above | 2 | | |
| Rating of Value If score is: $\square 2-4 = H \square 1 = M \square 0 = L$ Record the | rating on the f | irst page | | |

| DEPRESSIONAL AND FLATS WETLANDS | |
|---|------------|
| Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradati | on |
| D 4.0. Does the site have the potential to reduce flooding and erosion? | |
| D 4.1. <u>Characteristics of surface water outflows from the wetland</u> : | |
| ☐ Wetland is a depression or flat depression with no surface water leaving it (no outlet). points = 4 | |
| $\ \square$ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently | 0 |
| flowing outlet. points = 2 | U |
| ☐ 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. <u>Depth of storage during wet periods:</u> <i>Estimate the height of ponding above the bottom of the outlet. For wetlands</i> | |
| 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. □ Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet. points = 7 points = 5 | |
| ☐ Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet. points = 3 | 0 |
| ☐ The wetland is a "headwater" wetland. | |
| ☐ Wetland is a fleatwater wetland. ☐ Wetland is flat but has small depressions on the surface that trap water. ☐ points = 1 | |
| ✓ Wettaria is not but has small depressions on the surface that trap water. ✓ 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 | 5 |
| \Box The area of the basin is 10 to 100 times the area of the unit. points = 3 | _ |
| \Box 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: \Box 12-16 = H \Box 6-11 = M \boxtimes 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? \square Yes = 1 \square No = 0 | 0 |
| D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? \square Yes = 1 \square No = 0 | 0 |
| D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at | 0 |
| >1 residence/ac, urban, commercial, agriculture, etc.)? \square Yes = 1 \square No = 0 | - |
| Total for D 5 Add the points in the boxes above | 0 |
| Rating of Landscape Potential If score is: $\Box 3 = H \Box 1$ or $2 = M \Box 0 = L$ 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. | |
| Surface flooding problems are in a sub-basin farther down-gradient. | |
| ☐ Flooding from groundwater is an issue in the sub-basin. points = 1 | 2 |
| \Box 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 | |
| \Box There are no problems with flooding downstream of the wetland. points = 0 | 1 |
| = mere are no problems man nooding downstream of the westand. | |
| D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? | 0 |
| | 0 |

| 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 □ Seasonally flooded or inundated □ Seasonally flooded or inundated □ Saturated only □ Permanently flowing stream or river in, or adjacent to, the wetland □ Seasonally flowing stream in, or adjacent to, the wetland □ Lake Fringe wetland □ Freshwater tidal wetland □ Permanently flowing stream or river in, or adjacent to, the wetland □ Lake Fringe wetland □ Seasonally flowing stream in, or adjacent to, the wetland □ Lake Fringe wetland □ Permanently flowing stream in, or adjacent to, the wetland □ Lake Fringe wetland □ Permanently flowing stream in, or adjacent to, the wetland □ Lake Fringe wetland □ Permanently flowing stream in, or adjacent to, the wetland □ Lake Fringe wetland □ Permanently flowing stream in, or adjacent to, the wetland | 1 |
| H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle If you counted: > 19 species points = 2 5 - 19 species points = 1 < 5 species | 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 | 0 |

| 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). | 3 |
|--|-------------------|
| 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). | |
| Total for H 1 Add the points in the boxes above | 7 |
| Rating of Site Potential If score is: \Box 15-18 = H \boxtimes 7-14 = M \Box 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 <i>only habitat that directly abuts wetland unit</i>). **Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2] = 55% + (2%/2) =56% If total accessible habitat is: □ > 1/3 (33.3%) of 1 km Polygon | 3 |
| H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2 = 90% + (6%/2) = 96% Undisturbed habitat > 50% of Polygon points = 3 Undisturbed habitat 10-50% and in 1-3 patches points = 2 Undisturbed habitat 10-50% and > 3 patches points = 1 Undisturbed habitat < 10% of 1 km Polygon points = 0 H 2.3. Land use intensity in 1 km Polygon: If > 50% of 1 km Polygon is high intensity land use points = 0 ≤ 50% of 1 km Polygon is high intensity | 2) 0 |
| Total for H 2 Add the points in the boxes above | 6 |
| Rating of Landscape Potential If score is: □4-6 = H □1-3 = M □<1 = L Record the rating of the state of the | 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 list □ 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 | s) 2 |

Rating of Value If score is: $\boxtimes 2 = H \square 1 = M \square 0 = L$

Record the rating on the first page

WDFW Priority Habitats

<u>Priority habitats listed by WDFW</u> (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.

| \square 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 (<i>full descriptions in WDFW PHS report</i>). |
| \square 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 (<i>full descriptions in WDFW PHS report p. 158 – see web link above</i>). |
| ☑ 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 (<i>full descriptions in WDFW PHS report p. 161 – see web link above</i>). |
| ☑ 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. |
| \Box Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation. |
| \Box 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. |
| \boxtimes 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.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

| Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met. | |
|---|---------|
| SC 1.0. Estuarine wetlands | |
| Does the wetland meet the following criteria for Estuarine wetlands? | |
| ☐ The dominant water regime is tidal, | |
| ☐ Vegetated, and | |
| ☐ With a salinity greater than 0.5 ppt ☐ Yes —Go to SC 1.1 ☒ No= Not an estuarine wetland | |
| 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? | Cat. I |
| \square Yes = Category I \square No - Go to SC 1.2 | |
| SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? | |
| | Cat. I |
| 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. | Cat. II |
| \square The wetland has at least two of the following features: tidal channels, depressions with open water, | |
| or contiguous freshwater wetlands. \square Yes = Category I \square No= Category 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? Solution Solution | |
| SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? | |
| http://www.dnr.wa.gov/NHPwetlandviewer □Yes = Category I □No = Not a WHCV | |
| SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? | Cat. I |
| http://file.dnr.wa.gov/publications/amp_nh_wetlands_trs.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? | |
| SC 3.0. Bogs | |
| Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key</i> | |
| 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? \Box Yes – Go to SC 3.3 \boxtimes 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? $\Box Yes - Go to SC 3.3 \boxtimes No = Is not a bog$ | |
| , , , , , , , , , , , , , , , , , , , | Cat. I |
| cover of plant species listed in Table 4? \Box Yes = Is a Category I bog \Box 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? | |
| species (or combination of species) listed in Table 4 provide more than 50% of the cover under the carbopy: $\Box \text{Yes} = \text{Is a Category I bog} \qquad \Box \text{No} = \text{Is not a}$ | |

| 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? <i>If you answer YES you will still need to rate the wetland based on its functions.</i> □ 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). | Cat. I |
| □Yes = Category I ⊠No = Not a forested wetland for this section | |
| SC 5.0. Wetlands in Coastal Lagoons | |
| Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? | |
| \Box 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 | Cat. I |
| bottom) | . |
| ☐ 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? | |
| \square The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has | Cat. II |
| less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). | |
| \Box At least $\frac{3}{4}$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | |
| un- mowed grassland. \Box 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: | Cat I |
| ☐ Long Beach Peninsula: Lands west of SR 103 | |
| ☐ Grayland-Westport: Lands west of SR 105 | |
| \square Ocean Shores-Copalis: Lands west of SR 115 and SR 109 | Cat. II |
| \square Yes – Go to SC 6.1 \square No = not an interdunal wetland for rating | Cat. II |
| 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)? \Box Yes = Category I \Box No – Go to SC 6.2 | Cat. III |
| 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 | |
| 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 |
| □ 1es - Category III □ NO - Category IV | |
| | |
| Category of wetland based on Special Characteristics | NΙΛ |
| If you answered No for all types, enter "Not Applicable" on Summary Form | NA |

Wetland name or number: Click here to enter text.

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RATING SUMMARY – Western Washington

Name of wetland (or ID #): AAA Date of site visit: 4/15/2021

Rated by: <u>Jamie Sloan and Roen Hohlfeld</u> Trained by Ecology? $\boxtimes Y \square N$ Date of training: <u>9/2017</u>

HGM Class used for rating: <u>Depressional</u> 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: Google Earth, Pierce County

OVERALL WETLAND CATEGORY (based on functions ⊠ or special characteristics □)

1. Category of wetland based on FUNCTIONS

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

| FUNCTION | | mprov ter Q | ing uality | Hydrologic | | Habitat | | | | |
|------------------------|--------------------------------|----------------|---------------|------------|---|----------|----------|---|---|-------|
| | Circle the appropriate ratings | | | | | | | | | |
| Site Potential | Н | M | L | Н | M | L | Н | M | L | |
| Landscape Potential | Н | М | <u>L</u> | Н | М | <u>L</u> | <u>H</u> | М | L | |
| Value | <u>H</u> | М | L | <u>H</u> | М | L | <u>H</u> | М | L | TOTAL |
| Score Based on Ratings | | 6 | | | 6 | | | 8 | | 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,L4 = 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 | | \boxtimes | | |

Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

| Map of: | To answer questions: | Figure # |
|---|----------------------|----------|
| Cowardin plant classes | D 1.3, H 1.1, H 1.4 | 1 |
| Hydroperiods | D 1.4, H 1.2 | 2 |
| Location of outlet (can be added to map of hydroperiods) | D 1.1, D 4.1 | 2 |
| Boundary of area within 150 ft of the wetland (can be added to another figure) | D 2.2, D 5.2 | 2 |
| Map of the contributing basin | D 4.3, D 5.3 | 3 |
| 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 | 4 |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website) | D 3.1, D 3.2 | 5 |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web) | D 3.3 | 6 |

HGM Classification of Wetlands in Western Washington

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you

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

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? \boxtimes NO – go to 2 \square **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. **YES** - The wetland class is **Flats** \boxtimes NO – go to 3 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; \square At least 30% of the open water area is deeper than 6.6 ft (2 m). \boxtimes 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? \boxtimes 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.

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

The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that

⊠The water leaves the wetland **without being impounded**.

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

 \Box The overbank flooding occurs at least once every 2 years.

 \boxtimes NO – go to 5

stream or river.

deep).

 \square **YES** - The wetland class is **Slope**

| Wetland name or number: |
|-------------------------|
|-------------------------|

| | NO – go to 6NOTE: The Riverine unit can contain depression flooding | \square YES – The wetland class is Riverine as that are filled with water when the river is not |
|----|--|---|
| 5. | | ession in which water ponds, or is saturated to the ans that any outlet, if present, is higher than the interior |
| | \square NO – go to 7 | ⊠ YES – The wetland class is Depressional |
| 7. | flooding? The unit does not pond surface water | rea with no obvious depression and no overbank more than a few inches. The unit seems to be ne wetland may be ditched, but has no obvious natural |
| | □ NO – go to 8 | \square 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 | HGM class to |
|---------------------------------------|---------------|
| being rated | use in rating |
| Slope + Riverine | Riverine |
| Slope + Depressional | Depressional |
| Slope + Lake Fringe | Lake Fringe |
| Depressional + Riverine along stream | Depressional |
| within boundary of depression | |
| Depressional + Lake Fringe | Depressional |
| Riverine + Lake Fringe | Riverine |
| Salt Water Tidal Fringe and any other | Treat as |
| class of freshwater wetland | 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.

| 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: | 3 | | | | | |
| \square 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 = 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 □ Wetland has persistent, ungrazed, plants > 1/2 of area □ Wetland has persistent, ungrazed plants > 1/10 of area □ Wetland has persistent, ungrazed plants < 1/10 of area □ Wetland has persistent, ungrazed plants < 1/10 of area | 5 | | | | | |
| 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 □ Area seasonally ponded is > ¼ total area of wetland □ Area seasonally ponded is < ¼ total area of wetland □ Area seasonally ponded is < ¼ total area of wetland □ Area seasonally ponded is < ¼ total area of wetland | 0 | | | | | |
| Total for D 1 Add the points in the boxes above | 8 | | | | | |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 0-5 = L Record the rating on the | e 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? \square Yes = 1 \boxtimes No = 0 | 0 | | | | | |
| D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? \square Yes = 1 \boxtimes No = 0 D 2.3. Are there septic systems within 250 ft of the wetland? \square Yes = 1 \boxtimes No = 0 | | | | | | |
| D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1-D 2.3? Source: | 0 | | | | | |
| Total for D 2 Add the points in the boxes above | 0 | | | | | |
| Rating of Landscape Potential If score is: \Box 3 or 4 = H \Box 1 or 2 = M \boxtimes 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? \Box Yes = 1 \boxtimes 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)? | 2 | | | | | |
| Total for D 3 Add the points in the boxes above | 2 | | | | | |
| Rating of Value If score is: $\square 2-4 = H$ $\square 1 = M$ $\square 0 = L$ Record the rating on the | ne first page | | | | | |

| DEPRESSIONAL AND FLATS WETLANDS | |
|---|------------|
| Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradat | ion |
| 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 | |
| \square Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently | 1 |
| flowing outlet. points = 2 | 4 |
| \square Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1 | |
| \square Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. points = 0 | |
| D 4.2. <u>Depth of storage during wet periods:</u> 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. | |
| \square Marks of ponding are 3 ft or more above the surface or bottom of outlet. points = 7 | |
| ☐ Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet. points = 5 | 0 |
| ☐ 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 | 5 |
| ☐ The area of the basin is 10 to 100 times the area of the unit. points = 3 | |
| ☐ The area of the basin is more than 100 times the area of the unit. points = 0 | |
| ☐ Entire wetland is in the Flats class. points = 5 | |
| Total for D 4 Add the points in the boxes above | 9 |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 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? \square Yes = 1 \boxtimes No = 0 | 0 |
| D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? \square Yes = 1 \square No = 0 | 0 |
| D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at | 0 |
| >1 residence/ac, urban, commercial, agriculture, etc.)? □Yes = 1 ☑ No = 0 | |
| Total for D 5 Add the points in the boxes above | 0 |
| Rating of Landscape Potential If score is: $\Box 3 = H$ $\Box 1$ or $2 = M$ $\boxtimes 0 = L$ Record the rating on the | first page |
| D 6.0. Are the hydrologic functions provided by the site valuable to society? | |
| D 6.1. The unit is in a landscape that has flooding problems. Choose the description that best matches conditions around | |
| the wetland unit being rated. Do not add points. <u>Choose the highest score if more than one condition is met</u> . | |
| The wetland captures surface water that would otherwise flow down-gradient into areas where flooding has | |
| damaged human or natural resources (e.g., houses or salmon redds): | |
| ● ☑ Flooding occurs in a sub-basin that is immediately down-gradient of unit. points = 2 | |
| • Surface flooding problems are in a sub-basin farther down-gradient. points = 1 | 2 |
| ☐ 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 | |
| Explain why: points = 0 ☐ There are no problems with flooding downstream of the wetland. 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? | 0 |
| ☐ There are no problems with flooding downstream of the wetland. points = 0 | 0 2 |

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

Record the rating on the first page

| These questions apply to wetlands of all HGM classes. | | | | | |
|---|---|--|--|--|--|
| HABITAT FUNCTIONS - Indicators that site functions to provide important habitat | | | | | |
| H 1.0. Does the site have the potential to provide habitat? | | | | | |
| H 1.1. Structure of plant community: Indicators are Cowardin classes and strata within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked. □ Aquatic bed | 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 | 2 | | | | |
| H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle If you counted: > 19 species points = 2 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 | 0 | | | | |

| 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 3.3 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). | | | |
| Total for H 1 Add the points in the boxes above | 8 | | |
| Rating of Site Potential If score is: \Box 15-18 = H \boxtimes 7-14 = M \Box 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 <i>only habitat that directly abuts wetland unit</i>). Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2] = 45% + (1%/2) =45.5% If total accessible habitat is: □ > 1/3 (33.3%) of 1 km Polygon □ 20-33% of 1 km Polygon □ 10-19% of 1 km Polygon □ < 10% of 1 km Polygon □ points = 0 | 3 | | |
| H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2 = 91.5 % + (5.5%/2) = 94.25% Undisturbed habitat > 50% of Polygon Undisturbed habitat 10-50% and in 1-3 patches Undisturbed habitat 10-50% and > 3 patches Undisturbed habitat 10-50% and > 3 patches Undisturbed habitat < 10% of 1 km Polygon Points = 0 H 2.3. Land use intensity in 1 km Polygon: If > 50% of 1 km Polygon is high intensity land use ≤ 50% of 1 km Polygon is high intensity points = 0 | 2) 0 | | |
| Total for H 2 Add the points in the boxes above | 6 | | |
| Rating of Landscape Potential If score is: $\square 4-6 = H$ $\square 1-3 = M$ $\square < 1 = L$ Record the rating of | | | |
| 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 | s) 2 | | |

Rating of Value If score is: $\boxtimes 2 = H \square 1 = M \square 0 = L$

Record the rating on the first page

WDFW Priority Habitats

<u>Priority habitats listed by WDFW</u> (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). |
|---|
| \boxtimes Biodiversity Areas and Corridors : Areas of habitat that are relatively important to various species of native fish and wildlife (<i>full descriptions in WDFW PHS report</i>). |
| \square Herbaceous Balds: Variable size patches of grass and forbs on shallow soils over bedrock. |
| \boxtimes 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 (<i>full descriptions in WDFW PHS report p. 158 – see web link above</i>). |
| \boxtimes Riparian : The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other. |
| \square Westside Prairies: Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (<i>full descriptions in WDFW PHS report p. 161 – see web link above</i>). |
| ☑ 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. (<i>full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page</i>). |
| \Box 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. |
| \Box Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation. |
| \Box Talus: Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, and or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs. |
| \boxtimes 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.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

| Wetland Type | Category |
|--|----------|
| Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met. | |
| SC 1.0. Estuarine wetlands | |
| Does the wetland meet the following criteria for Estuarine wetlands? | |
| \square 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 | |
| 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? | Cat. I |
| \Box Yes = Category I \Box No - Go to SC 1.2 | Cut. 1 |
| | |
| SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? | Cat. I |
| ☐ The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has | Cat. i |
| less than 10% cover of non-native plant species. (If non-native species are <i>Spartina</i> , see page 25) | |
| \square At least $lpha$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | Cat. II |
| un- mowed grassland. | Cat. II |
| \square 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 | |
| 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? | |
| — | |
| SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? | |
| http://www.dnr.wa.gov/NHPwetlandviewer □Yes = Category I □No = Not a WHCV | Cat. I |
| SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? | |
| http://file.dnr.wa.gov/publications/amp_nh_wetlands_trs.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? | |
| <u> </u> | |
| 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? \Box Yes – Go to SC 3.3 \boxtimes 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? \square Yes – Go to SC 3.3 \boxtimes 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% | Cat. I |
| 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 | |

| 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? <i>If you answer YES you will still need to rate the wetland based on its functions.</i> □ 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 | | |
| 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) ☐ 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). ☐ At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. ☐ The wetland is larger than ¹/₁₀ ac (4350 ft²) ☐ Yes = Category I ☐ No = Category II | Cat. 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 Ocean Shores-Copalis: Lands west of SR 115 and SR 109 Yes – Go to SC 6.1 No = not an interdunal wetland for rating | Cat I Cat. II | |
| 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)? 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 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. III Cat. IV | |
| Category of wetland based on Special Characteristics If you answered No for all types, enter "Not Applicable" on Summary Form | NA | |

Wetland name or number: Click here to enter text.

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RATING SUMMARY – Western Washington

Name of wetland (or ID #): BBB Date of site visit: 4/15/2021

Rated by: <u>Jamie Sloan and Roen Hohlfeld</u> Trained by Ecology? \boxtimes Y \square N Date of training: <u>9/2017</u>

HGM Class used for rating: <u>Depressional</u> 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: Google Earth, Pierce County

OVERALL WETLAND CATEGORY (based on functions ⊠ or special characteristics □)

1. Category of wetland based on FUNCTIONS

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

| FUNCTION | Improving Water Quality | | | Н | ydrolo | gic | Habitat | | | |
|--------------------------------|----------------------------|---|----------|----------|--------|----------|----------|---|----------|-------|
| Circle the appropriate ratings | | | | | | | | | | |
| Site Potential | Н | M | L | Н | M | L | Н | М | <u>L</u> | |
| Landscape Potential | Н | М | <u>L</u> | Н | М | <u>L</u> | <u>H</u> | М | L | |
| Value | <u>H</u> | М | L | <u>H</u> | М | L | <u>H</u> | М | L | TOTAL |
| Score Based on Ratings | | 6 | | | 6 | | | 7 | | 19 |

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 | | \boxtimes |

Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

| Map of: | To answer questions: | Figure # |
|---|----------------------|----------|
| Cowardin plant classes | D 1.3, H 1.1, H 1.4 | 1 |
| Hydroperiods | D 1.4, H 1.2 | 2 |
| Location of outlet (can be added to map of hydroperiods) | D 1.1, D 4.1 | 2 |
| Boundary of area within 150 ft of the wetland (can be added to another figure) | D 2.2, D 5.2 | 2 |
| Map of the contributing basin | D 4.3, D 5.3 | 3 |
| 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 | 4 |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website) | D 3.1, D 3.2 | 5 |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web) | D 3.3 | 6 |

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? \boxtimes NO – go to 2 \square **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. **YES** - The wetland class is **Flats** \boxtimes NO – go to 3 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; \square At least 30% of the open water area is deeper than 6.6 ft (2 m). \boxtimes 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? \boxtimes 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**. \boxtimes NO – go to 5 \square **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

The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that

stream or river.

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

 \Box The overbank flooding occurs at least once every 2 years.

deep).

| | NO – go to 6NOTE: The Riverine unit can contain depression flooding | \square YES – The wetland class is Riverine ns that are filled with water when the river is not | |
|----|---|--|--|
| 6. | | ression in which water ponds, or is saturated to the rans that any outlet, if present, is higher than the interior | |
| | □ NO – go to 7 | $oxtimes \mathbf{YES}$ – The wetland class is Depressional | |
| 7. | 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 natioutlet. | | |
| | □ NO – go to 8 | \square 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 | HGM class to |
|---------------------------------------|---------------|
| being rated | use in rating |
| Slope + Riverine | Riverine |
| Slope + Depressional | Depressional |
| Slope + Lake Fringe | Lake Fringe |
| Depressional + Riverine along stream | Depressional |
| within boundary of depression | |
| Depressional + Lake Fringe | Depressional |
| Riverine + Lake Fringe | Riverine |
| Salt Water Tidal Fringe and any other | Treat as |
| class of freshwater wetland | 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.

| 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 ☐ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing | points = 3 ng outlet. points = 2 | 3 | |
| ☐ Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions). ☐ Yes | points = 1 $es = 4 \bowtie No = 0$ | 0 | |
| D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowar | | 5 | |
| 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 □ Area seasonally ponded is > ½ total area of wetland □ Area seasonally ponded is < ¼ total area of wetland | points = 4 points = 2 points = 0 | 2 | |
| Total for D 1 Add the points in the bo | oxes above | 10 | |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 0-5 = L Record the | e rating on the f | irst 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? | = 1 × No = 0 | 0 | |
| D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? \Box Yes = | = 1 ⊠ No = 0 | 0 | |
| D 2.3. Are there septic systems within 250 ft of the wetland? | = 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: | : 1 ⊠ No = 0 | 0 | |
| Total for D 2 Add the points in the bo | oxes above | 0 | |
| Rating of Landscape Potential If score is: $\square 3$ or $4 = H$ $\square 1$ or $2 = M$ $\boxtimes 0 = L$ 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? | = 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? \Box 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)? | | | |
| Total for D 3 Add the points in the bo | oxes above | 2 | |
| Rating of Value If score is: $\square 2-4 = H \square 1 = M \square 0 = L$ Record th | e rating on the f | irst page | |

| DEPRESSIONAL AND FLATS WETLANDS | | | |
|--|------------|--|--|
| Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation | | | |
| D 4.0. Does the site have the potential to reduce flooding and erosion? | | | |
| D 4.1. Characteristics of surface water outflows from the wetland: ☐ Wetland is a depression or flat depression with no surface water leaving it (no outlet). points = 4 ☐ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. points = 2 ☐ Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1 ☐ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. points = 0 | 4 | | |
| D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part. □ Marks of ponding are 3 ft or more above the surface or bottom of outlet. points = 7 □ Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet. points = 5 □ Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet. points = 3 □ The wetland is a "headwater" wetland. points = 3 □ Wetland is flat but has small depressions on the surface that trap water. points = 1 □ Marks of ponding less than 0.5 ft (6 in). | 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. □ The area of the basin is 10 to 100 times the area of the unit. □ The area of the basin is more than 100 times the area of the unit. □ Entire wetland is in the Flats class. | 5 | | |
| Total for D 4 Add the points in the boxes above | 9 | | |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 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? \square Yes = 1 \boxtimes No = 0 | 0 | | |
| D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? \square Yes = 1 \square No = 0 | 0 | | |
| D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? ☐ Yes = 1 ☒ No = 0 | 0 | | |
| Total for D 5 Add the points in the boxes above | 0 | | |
| Rating of Landscape Potential If score is: $\Box 3 = H$ $\Box 1$ or $2 = M$ $\boxtimes 0 = L$ 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 ■ 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. | 2 | | |
| D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? | 0 | | |
| | 2 | | |
| That the points in the boxes above | ı - | | |

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 1 ☐ Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1 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 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 1 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 H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle 1 If you counted: \square > 19 species points = 2 points = 1 \Box < 5 species points = 0 H 1.4. Interspersion of habitats Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. If you have four or more plant classes or three classes and open water, the rating is always high. 0 **None** = 0 points ☐ **Moderate** = 2 points \square Low = 1 point All three diagrams in this row are ☐ **HIGH** = 3points

| H 1.5. Special habitat features: | | | |
|--|--------------------------|----------------|--|
| Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i> | | | |
| ✓ Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long). | oj ponits. | | |
| ✓ Standing snags (dbh > 4 in) within the wetland. | | | |
| | ant 2 2 ft (1 ma) | | |
| Undercut banks are present for at least 6.6 ft (2 m) AND/OR overhanging plants extends at least over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m). | east 3.3 ft (1 m) | | |
| ☐ Stable steep banks of fine material that might be used by beaver or muskrat for denning (3 | 20 dograd | 3 | |
| slope) OR signs of recent beaver activity are present (cut shrubs or trees that have not yet | _ | | |
| where wood is exposed). | Weatherea | | |
| ☐ 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). | uic | | |
| ✓ Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1) | for list of | | |
| strata). | 0. 1130 0) | | |
| Total for H 1 Add the points in th | e boxes above | 6 | |
| Rating of Site Potential If score is: \Box 15-18 = H \Box 7-14 = M \boxtimes 0-6 = L Rec | ord the rating on t | 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 <i>only habitat that directly abuts wetland unit</i>). | | | |
| Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2] = 45% + (1%/2) | =45.5% | | |
| If total accessible habitat is: | | | |
| \boxtimes > 1/3 (33.3%) of 1 km Polygon | points = 3 | 3 | |
| ☐ 20-33% of 1 km Polygon | points = 2 | | |
| \square 10-19% of 1 km Polygon | points = 1 | | |
| \square < 10% of 1 km Polygon | points = 0 | | |
| H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. | | | |
| Calculate: % undisturbed habitat + [(%moderate and low intensity land uses)/2 = 91.5 % + (5.5%) | '2) = 94.25% | | |
| ☑ Undisturbed habitat > 50% of Polygon | points = 3 | 2 | |
| ☐ Undisturbed habitat 10-50% and in 1-3 patches | points = 2 | 3 | |
| ☐ Undisturbed habitat 10-50% and > 3 patches | points = 1 | | |
| ☐ Undisturbed habitat < 10% of 1 km Polygon | points = 0 | | |
| H 2.3. Land use intensity in 1 km Polygon: If | | | |
| ☐ > 50% of 1 km Polygon is high intensity land use | points = (- 2) | 0 | |
| \(\sigma \) \(\sigma \) \(\sigma \) \(\sigma \) \(\sigma \) \(\sigma \) \(\sigma \) \(\sigma \) \(\sigma \) \(\sigma \) \(\sigma \) \(\sigma \) \(\sigma \) \(\sigma \) \(\sigma \) \(\sigma \) \(\sigma \) \(\sigma \) \(\sigma \) \(\sigma \) \(\sigma \) | points = 0 | | |
| Total for H 2 Add the points in th | · | 6 | |
| · | ord the rating on th | ne first page | |
| manager and an arranger of the manager and arranger and arranger and arranger and arranger and arranger and arranger arranger and arranger | g on an | .e j et 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 | | |
| oxtimes It has 3 or more priority habitats within 100 m (see next page) | | | |
| \square It provides habitat for Threatened or Endangered species (any plant or animal on the state | te or federal lists) | | |
| ☐ It is mapped as a location for an individual WDFW priority species | | 2 | |
| ☐ 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 | nginta 4 | | |
| ☐ Site has 1 or 2 priority habitats (listed on next page) within 100 m ☐ Site does not meet any of the criteria above | points = 1 points = 0 | | |
| | points = 0 | | |

Rating of Value If score is: $\boxtimes 2 = H \square 1 = M \square 0 = L$

Record the rating on the first page

WDFW Priority Habitats

<u>Priority habitats listed by WDFW</u> (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.

| \square 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 (<i>full descriptions in WDFW PHS report</i>). |
| \square Herbaceous Balds: Variable size patches of grass and forbs on shallow soils over bedrock. |
| \boxtimes 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 (<i>full descriptions in WDFW PHS report p. 158 – see web link above</i>). |
| \square 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 (<i>full descriptions in WDFW PHS report p. 161 – see web link above</i>). |
| ☐ 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). |
| \square 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. |
| \Box Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation. |
| \Box Talus: Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, and or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs. |
| \boxtimes 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.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

| Wetland Type | Category |
|--|----------|
| Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met. | |
| SC 1.0. Estuarine wetlands | |
| Does the wetland meet the following criteria for Estuarine wetlands? | |
| ☐ The dominant water regime is tidal, | |
| \square Vegetated, and | |
| ☐ With a salinity greater than 0.5 ppt ☐ Yes –Go to SC 1.1 ☐ No= Not an estuarine wetland | |
| 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? | Cat. I |
| \square Yes = Category I \square No - Go to SC 1.2 | |
| SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? | |
| \square The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has | Cat. I |
| less than 10% cover of non-native plant species. (If non-native species are Spartina, see page 25) | |
| \square At least $rac{\pi}{4}$ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | |
| un- mowed grassland. | Cat. II |
| \Box The wetland has at least two of the following features: tidal channels, depressions with open water, | |
| or contiguous freshwater wetlands. \square Yes = Category I \square No= Category 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? | |
| SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? | |
| http://www.dnr.wa.gov/NHPwetlandviewer □Yes = Category I ☑No = Not a WHCV | |
| SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? | Cat. I |
| http://file.dnr.wa.gov/publications/amp nh wetlands trs.pdf | |
| \Box Yes – Contact WNHP/WDNR and go to SC 2.4 \Box 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? \Box Yes = Category I \Box No = Not a WHCV | |
| 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? \Box Yes – Go to SC 3.3 \boxtimes 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? | Cat. I |
| 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 | Cat. 1 |
| 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 | 1 |

| 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? <i>If you answer YES you will still need to rate the wetland based on its functions.</i> □ 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). | Cat. I |
| □Yes = Category I ⊠No = Not a forested wetland for this section | |
| 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) ☐ 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). ☐ At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. ☐ The wetland is larger than ¹/₁₀ ac (4350 ft²) ☐ Yes = Category I ☐ No = Category II | Cat. 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 Ocean Shores-Copalis: Lands west of SR 115 and SR 109 Yes – Go to SC 6.1 No = not an interdunal wetland for rating | Cat I Cat. II |
| 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)? 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 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. III Cat. IV |
| Category of wetland based on Special Characteristics If you answered No for all types, enter "Not Applicable" on Summary Form | NA |

Wetland name or number: Click here to enter text.

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Nisqually State Park

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March 2022

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WATER QUALITY ATLAS MAP (ALL WETLANDS)

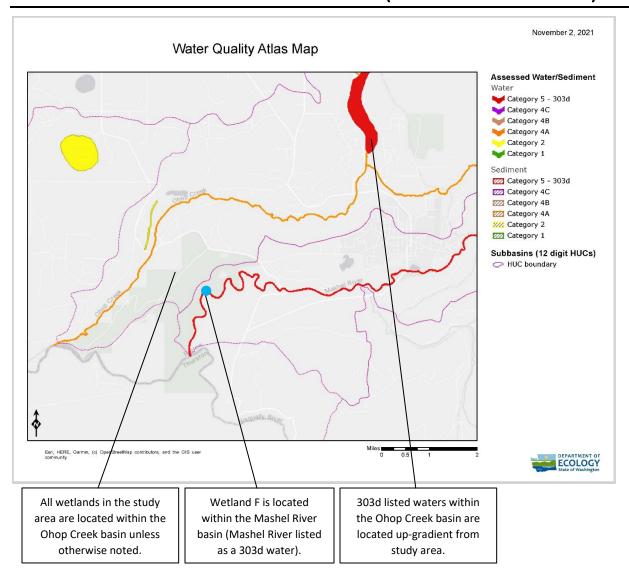


Figure 1. Screen-capture of 303(d) listed waters in basin from the Water Quality Atlas Map – S3.1, S3.2, R3.1

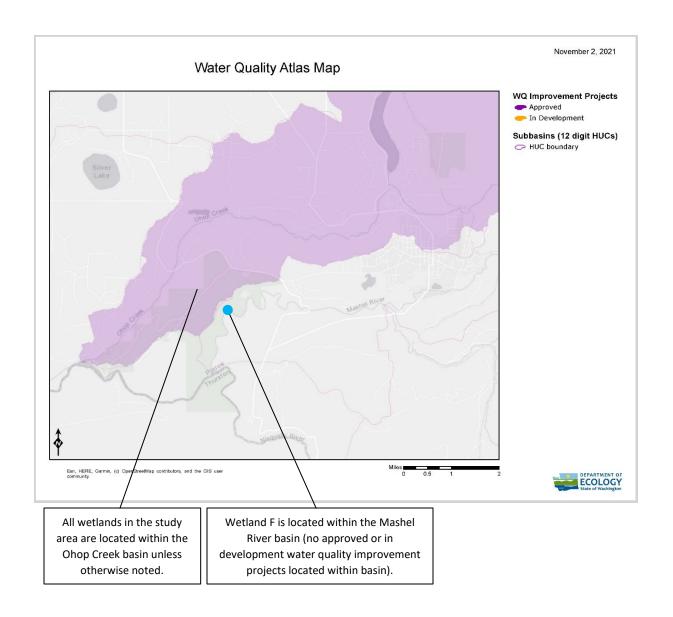


Figure 2. Screen-capture of Water Quality Improvement Projects (TMDLs) from the Water Quality Atlas Map – D3.1, D3.2, R.2, R3.3

COMBINED CONTRIBUTING BASIN FIGURES

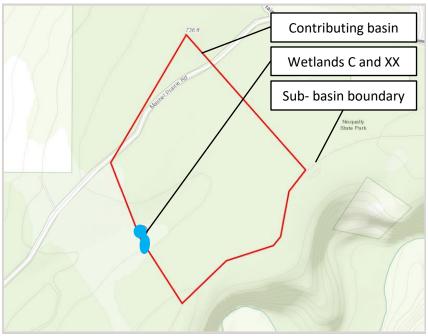


Figure 3. Map of the contributing basin – D4.3, D5.3

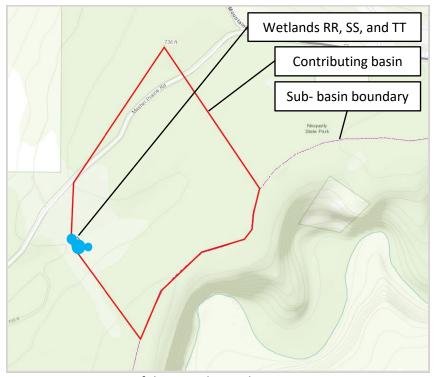


Figure 4. Map of the contributing basin – D4.3, D5.3

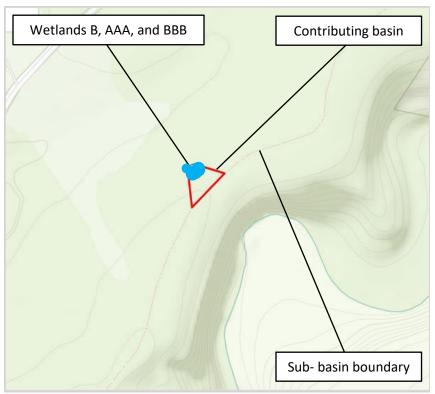


Figure 5. Map of the contributing basin – D4.3, D5.3

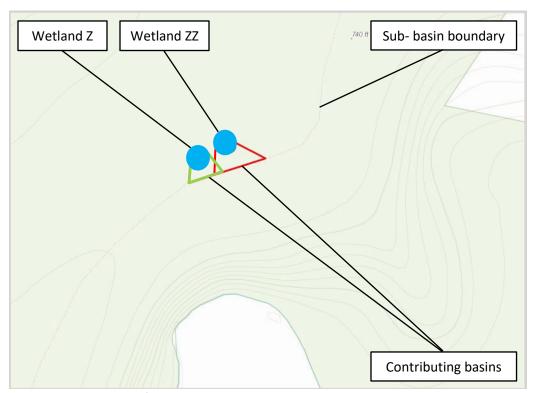


Figure 6. Map of the contributing basin – D4.3, D5.3

COMBINED HABITAT FIGURES

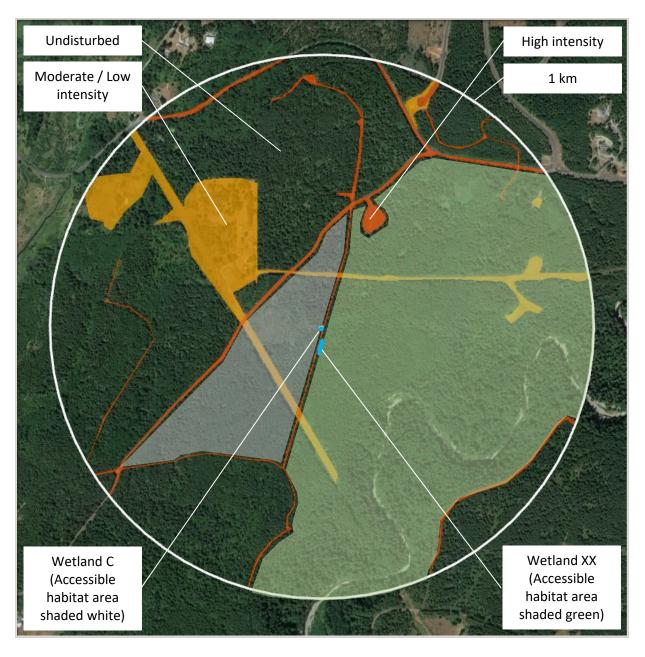


Figure 7. Undisturbed habitat and moderate-low intensity land uses within 1 km from wetland edge including polygon for accessible habitat – H2.1, H2.2, H2.3

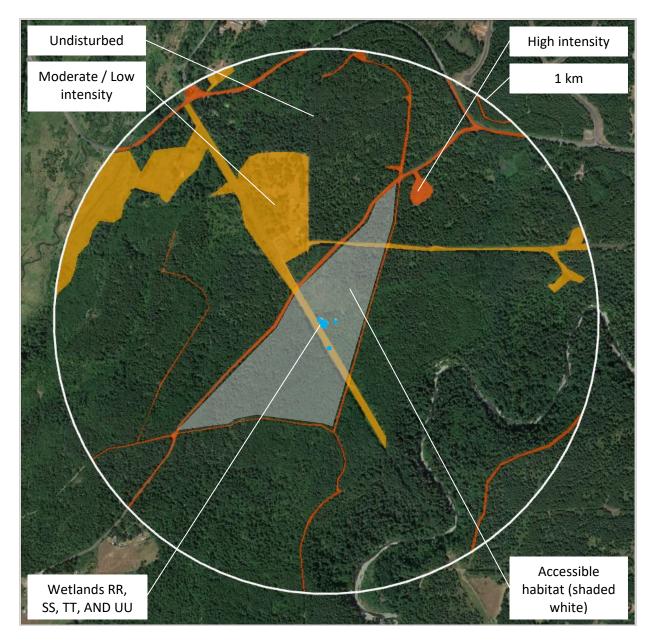


Figure 8. Undisturbed habitat and moderate-low intensity land uses within 1 km from wetland edge including polygon for accessible habitat – H2.1, H2.2, H2.3

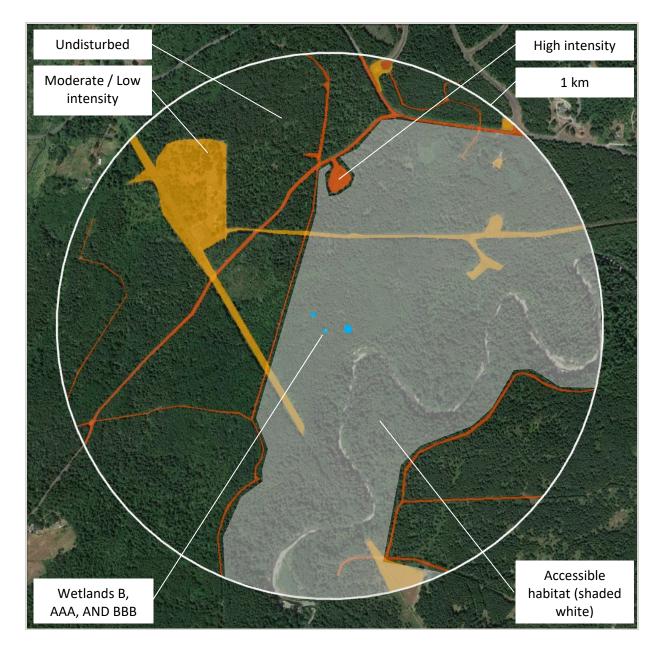


Figure 9. Undisturbed habitat and moderate-low intensity land uses within 1 km from wetland edge including polygon for accessible habitat – H2.1, H2.2, H2.3

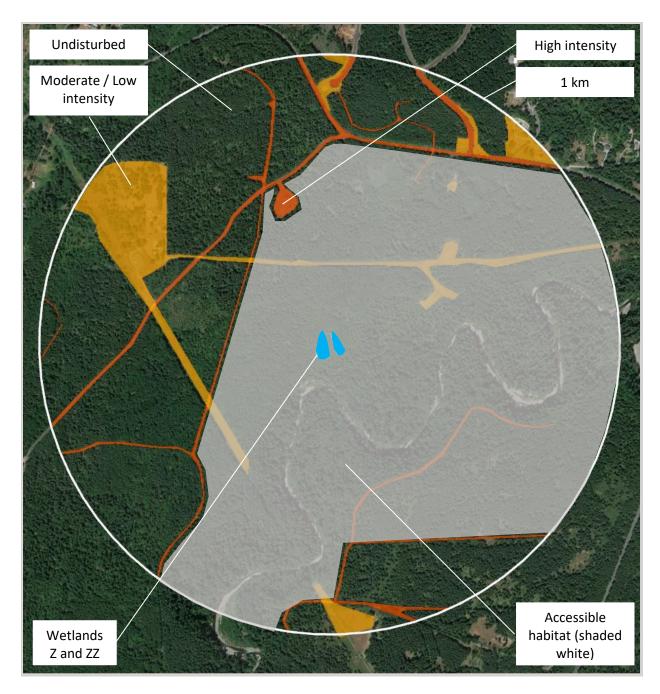


Figure 10. Undisturbed habitat and moderate-low intensity land uses within 1 km from wetland edge including polygon for accessible habitat – H2.1, H2.2, H2.3

AREA 1 - MAINTENANCE AND ADMINISTRATION BUILDINGS

Wetland CC Wetland FF

Wetland CC (Depressional)

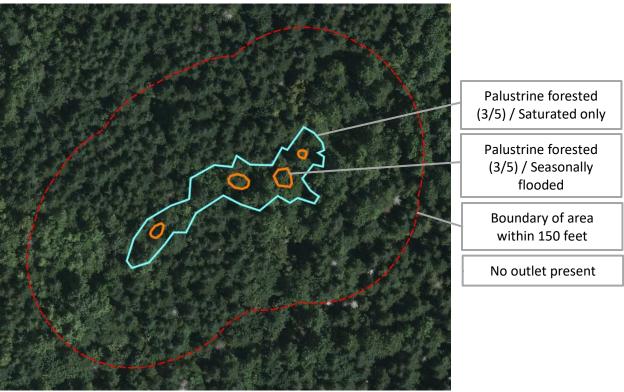


Figure CC-1. Cowardin plant classes, hydroperiods, outlet, and 150-foot area – D1.3, H1.1, H1.4, D1.1, D1.4, D2.2, D5.2, H1.2

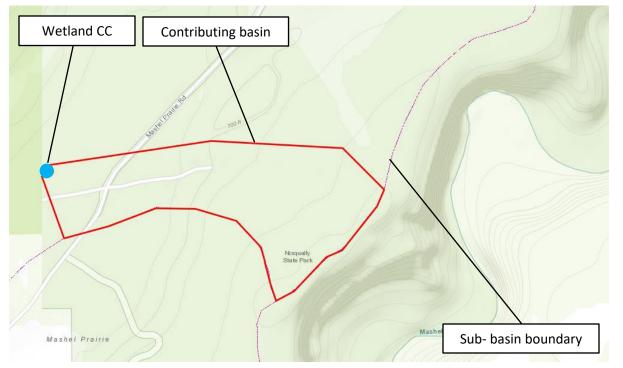


Figure CC-2. Map of the contributing basin – D4.3, D5.3

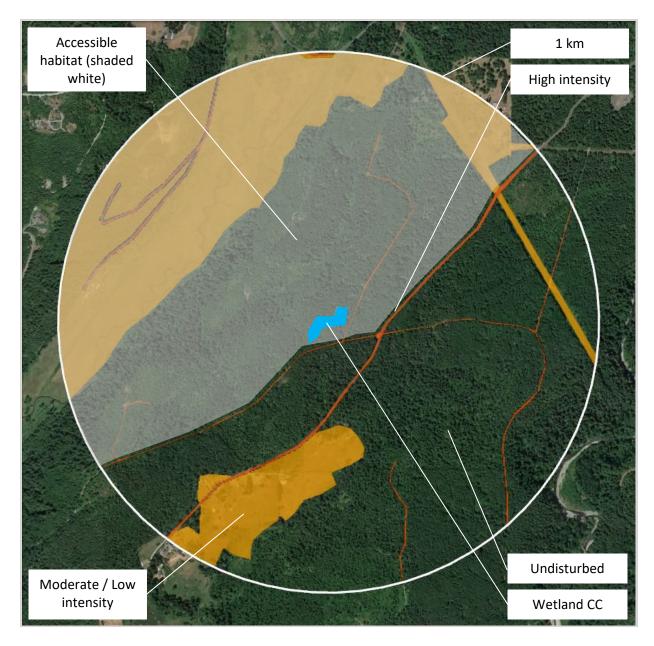


Figure CC-3. Undisturbed habitat and moderate-low intensity land uses within 1 km from wetland edge including polygon for accessible habitat – H2.1, H2.2, H2.3

Wetland FF (Depressional)

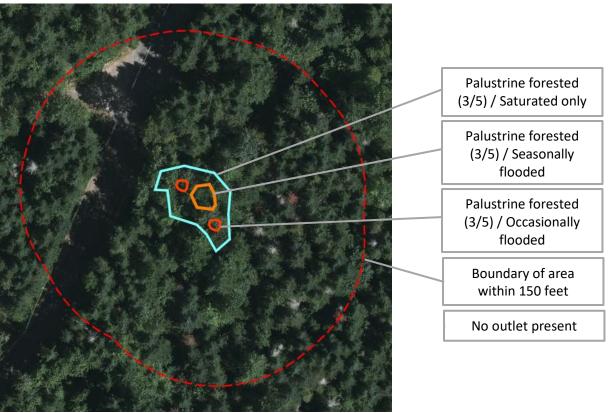


Figure FF-1. Cowardin plant classes, hydroperiods, outlet, and 150-foot area – D1.3, H1.1, H1.4, D1.1, D1.4, D2.2, D5.2, H1.2

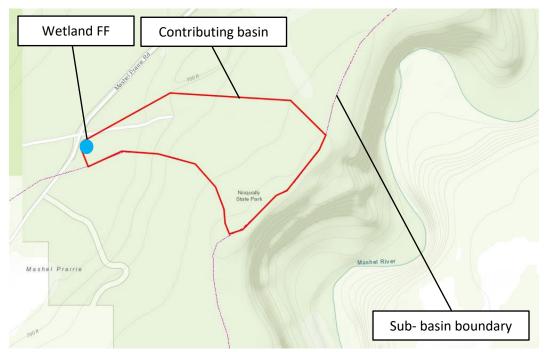


Figure FF-2. Map of the contributing basin – D4.3, D5.3

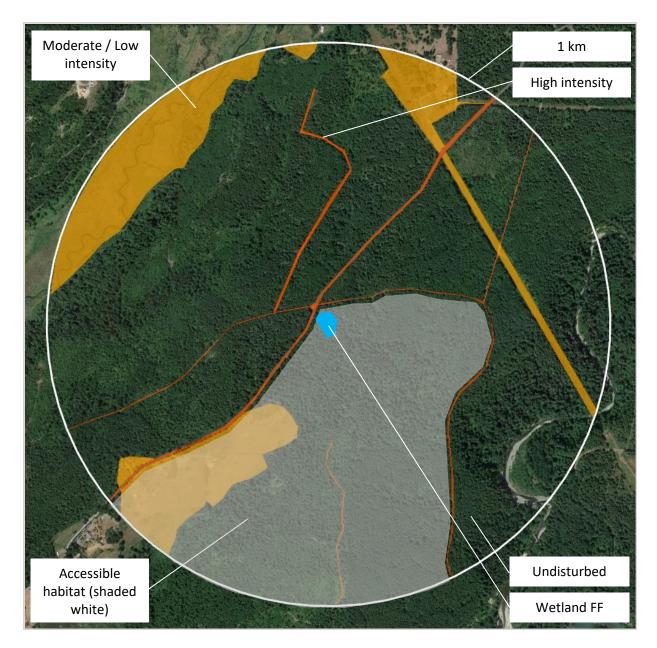


Figure FF-3. Undisturbed habitat and moderate-low intensity land uses within 1 km from wetland edge including polygon for accessible habitat – H2.1, H2.2, H2.3

AREA 2 — PARK ENTRY ROUNDABOUT

Wetland EE

Wetland EE (Depressional)

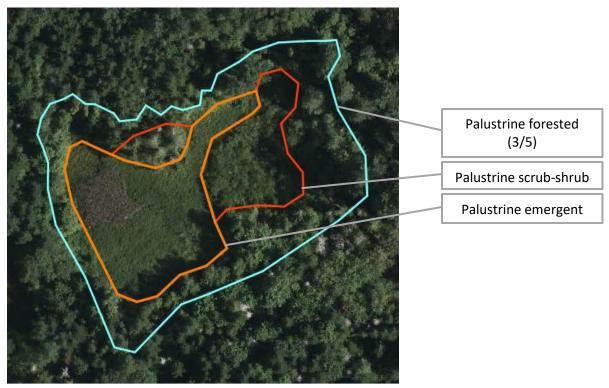


Figure EE-1. Cowardin plant classes – D1.3, H1.1, H1.4

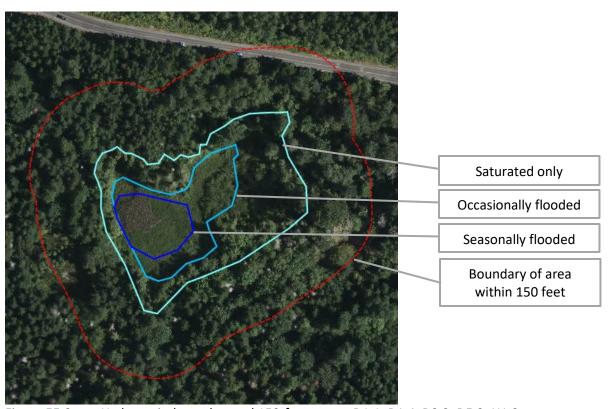


Figure EE-2. Hydroperiods, outlet, and 150-foot area – D1.1, D1.4, D2.2, D5.2, H1.2

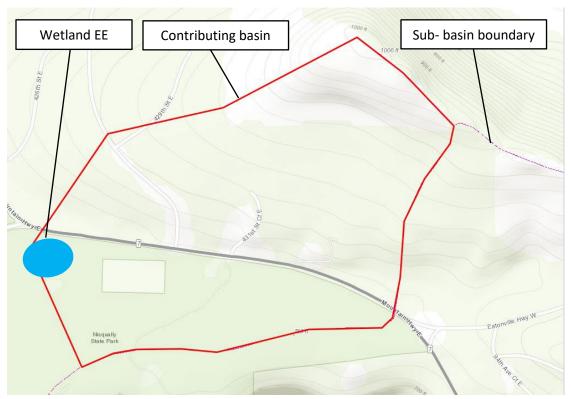


Figure EE-3. Map of the contributing basin – D4.3, D5.3

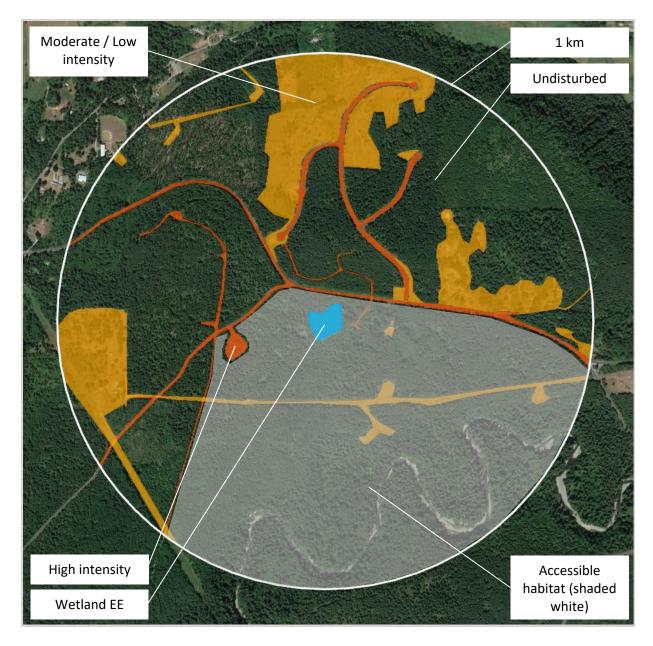


Figure EE-4. Undisturbed habitat and moderate-low intensity land uses within 1 km from wetland edge including polygon for accessible habitat – H2.1, H2.2, H2.3

AREA 3 — BOAT TRAILER PARKING LOT

Wetland H Wetland QQ

Wetland H (Depressional)

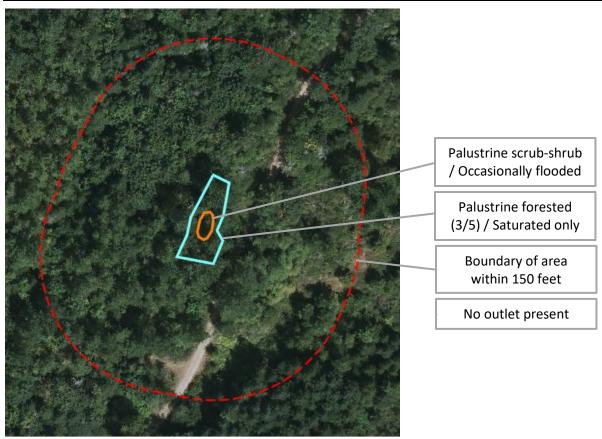


Figure H-1. Cowardin plant classes, hydroperiods, outlet, and 150-foot area – D1.3, H1.1, H1.4, D1.1, D1.4, D2.2, D5.2, H1.2

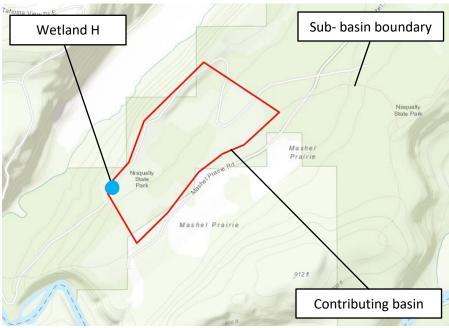


Figure H-2. Map of the contributing basin – D4.3, D5.3

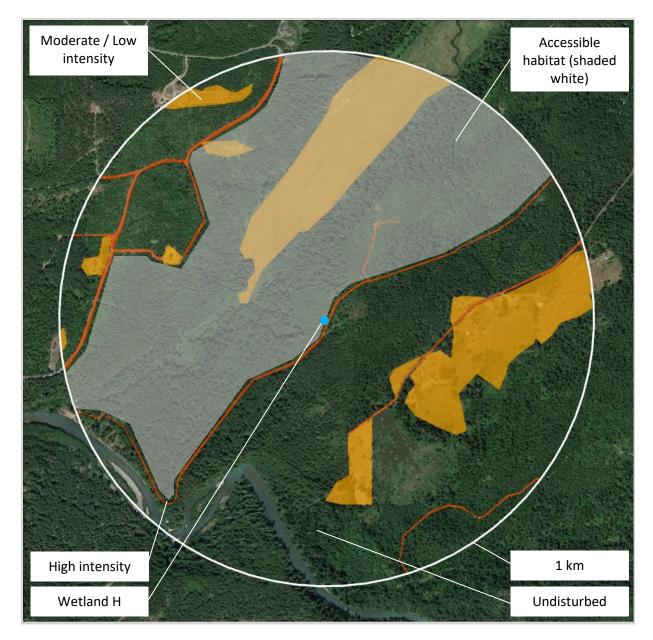


Figure H-3. Undisturbed habitat and moderate-low intensity land uses within 1 km from wetland edge including polygon for accessible habitat – H2.1, H2.2, H2.3

Wetland QQ (Depressional)

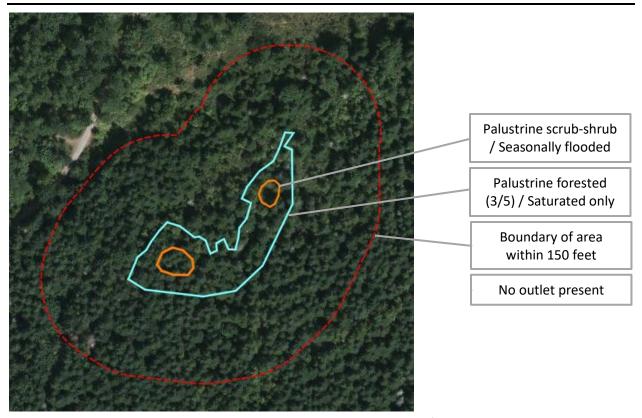


Figure QQ-1. Cowardin plant classes, hydroperiods, outlet, and 150-foot area – D1.3, H1.1, H1.4, D1.1, D1.4, D2.2, D5.2, H1.2

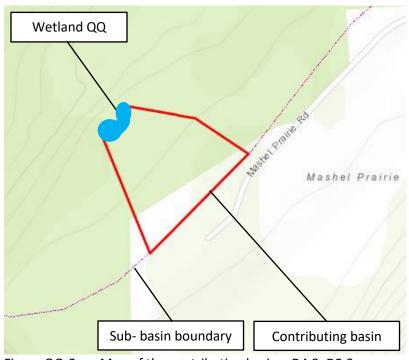


Figure QQ-2. Map of the contributing basin – D4.3, D5.3

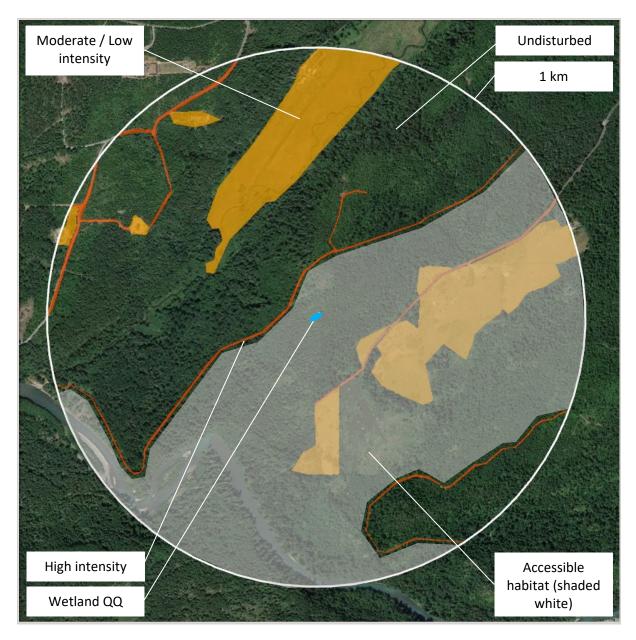


Figure QQ-3. Undisturbed habitat and moderate-low intensity land uses within 1 km from wetland edge including polygon for accessible habitat – H2.1, H2.2, H2.3

AREA 4 – TRAILHEAD, OVERLOOKS, AND BOARDWALK

Wetland GG Wetland HH Wetland FFF

Wetland GG (Depressional)

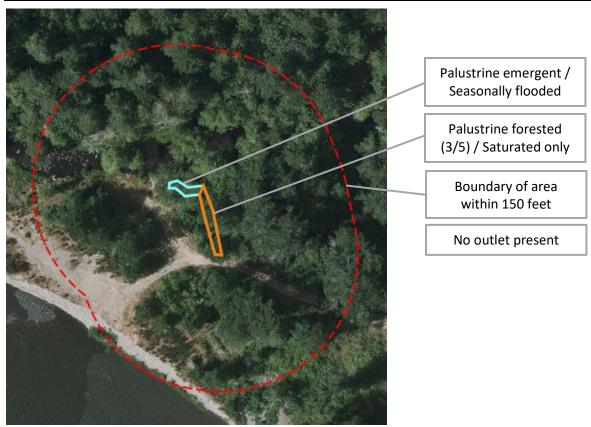


Figure GG-1. Cowardin plant classes, hydroperiods, outlet, and 150-foot area – D1.3, H1.1, H1.4, D1.1, D1.4, D2.2, D5.2, H1.2

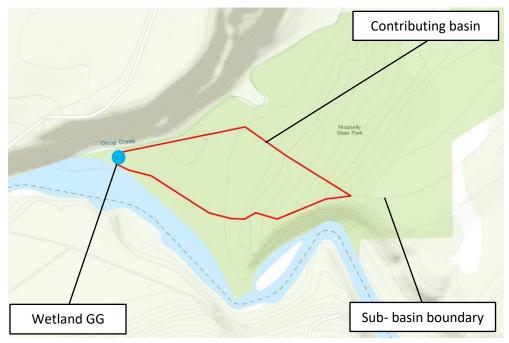


Figure GG-2. Map of the contributing basin – D4.3, D5.3

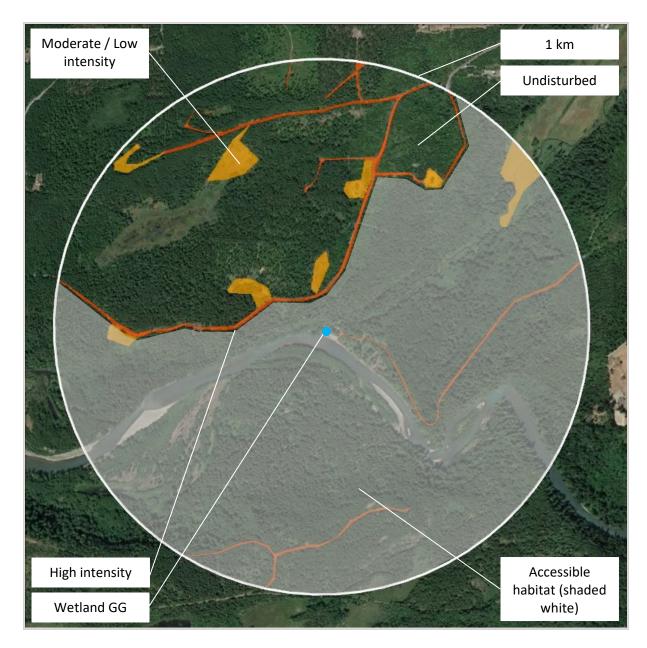


Figure GG-3. Undisturbed habitat and moderate-low intensity land uses within 1 km from wetland edge including polygon for accessible habitat – H2.1, H2.2, H2.3

Wetland HH (Depressional)

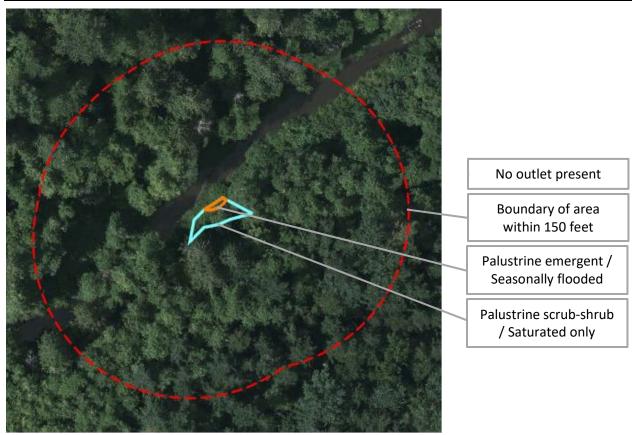


Figure HH-1. Cowardin plant classes, hydroperiods, outlet, and 150-foot area – D1.3, H1.1, H1.4, D1.1, D1.4, D2.2, D5.2, H1.2

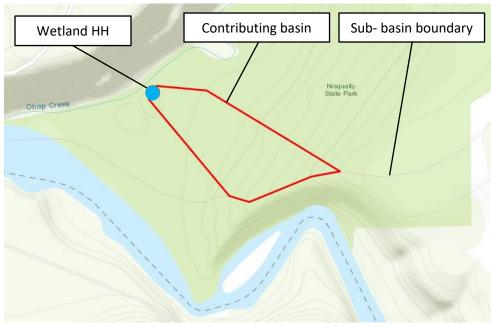


Figure HH-2. Map of the contributing basin – D4.3, D5.3

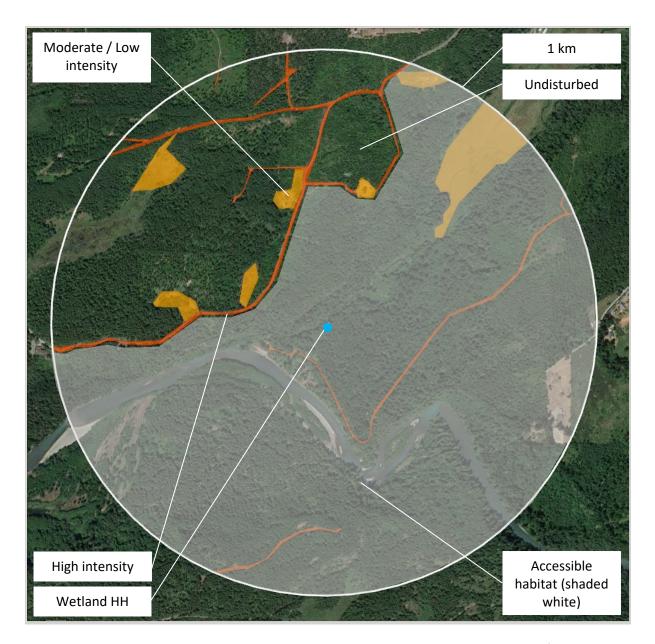


Figure HH-3. Undisturbed habitat and moderate-low intensity land uses within 1 km from wetland edge including polygon for accessible habitat – H2.1, H2.2, H2.3

Wetland FFF (Depressional)

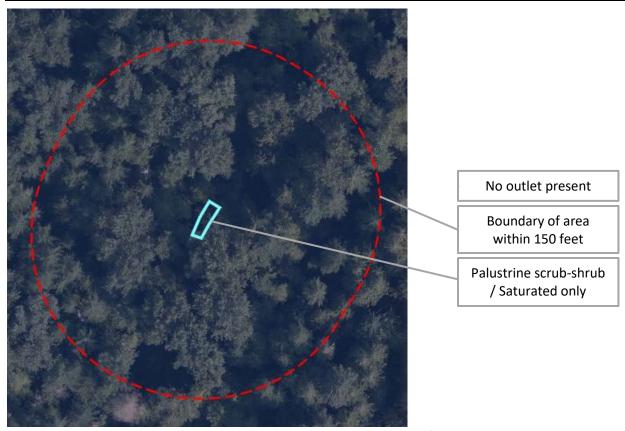


Figure FFF-1. Cowardin plant classes, hydroperiods, outlet, and 150-foot area – D1.3, H1.1, H1.4, D1.1, D1.4, D2.2, D5.2, H1.2

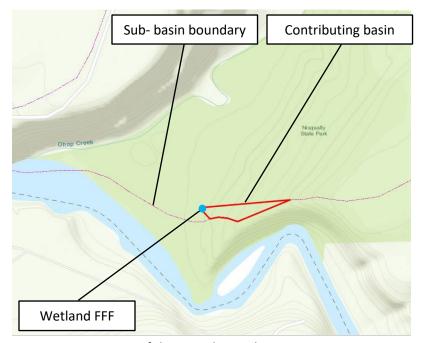


Figure FFF-2. Map of the contributing basin – D4.3, D5.3

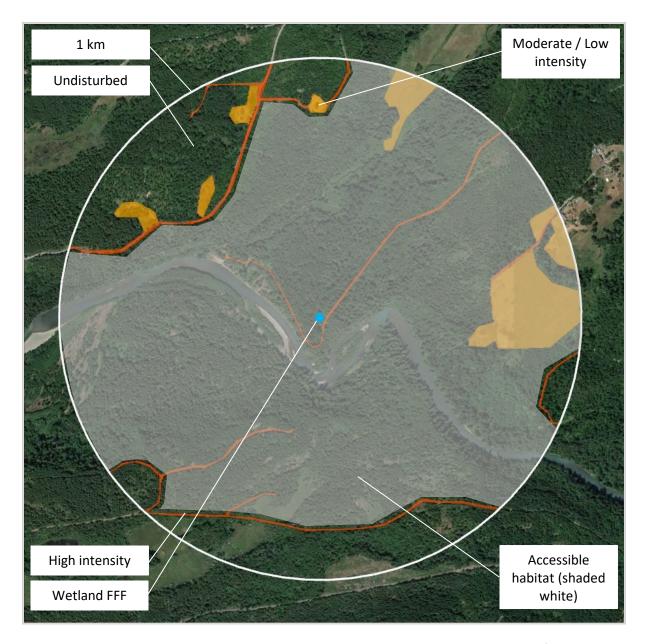


Figure FFF-3. Undisturbed habitat and moderate-low intensity land uses within 1 km from wetland edge including polygon for accessible habitat – H2.1, H2.2, H2.3

AREA 5 - MBR DRAINFIELD

Wetland CCC

Wetland CCC (Depressional)

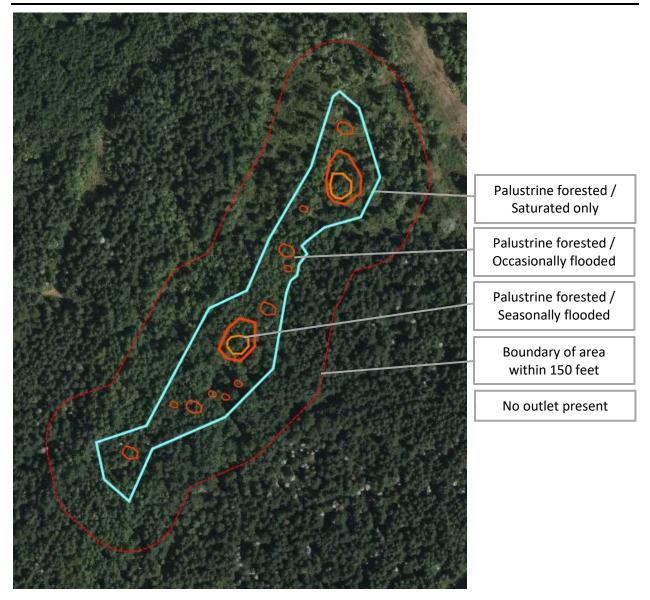


Figure CCC-1. Cowardin plant classes, hydroperiods, outlet, and 150-foot area – D1.3, H1.1, H1.4, D1.1, D1.4, D2.2, D5.2, H1.2

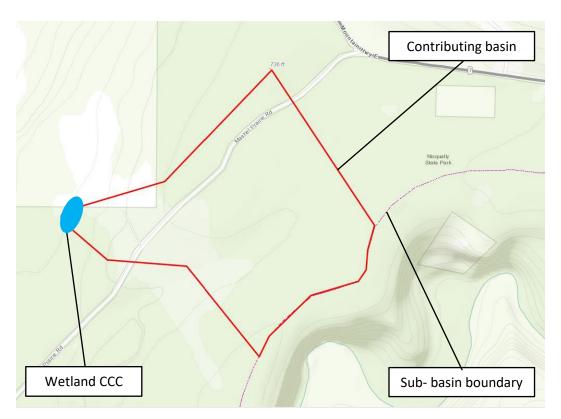


Figure CCC-2. Map of the contributing basin – D4.3, D5.3

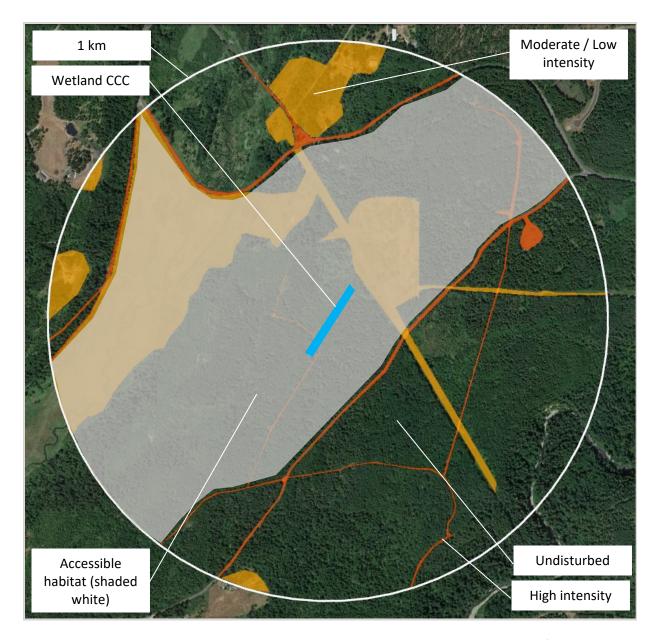


Figure CCC-3. Undisturbed habitat and moderate-low intensity land uses within 1 km from wetland edge including polygon for accessible habitat – H2.1, H2.2, H2.3

AREA 6 — CAMPGROUND

Wetland A

Wetland C

Wetland RR

Wetland SS

Wetland TT

Wetland UU

Wetland VV

Wetland WW

Wetland XX

Wetland A (Depressional)

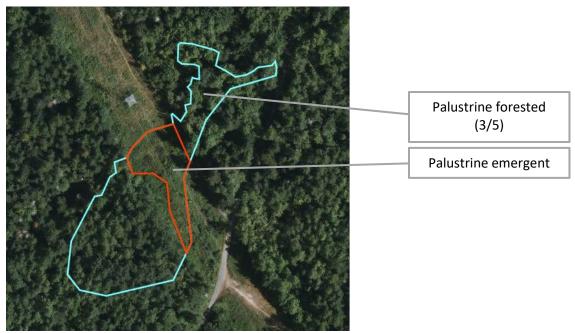


Figure A-1. Cowardin plant classes – D1.3, H1.1, H1.4

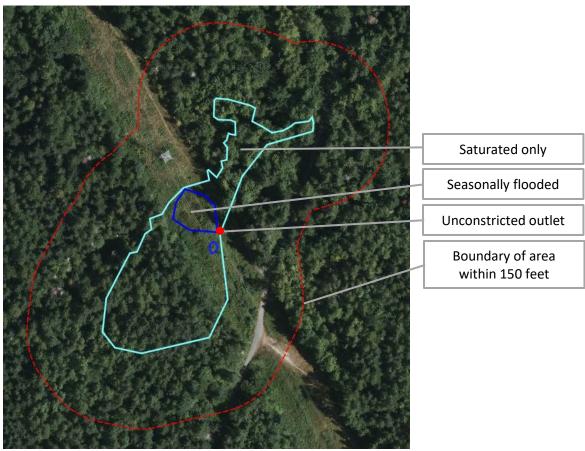


Figure A-2. Hydroperiods, outlet, and 150-foot area – D1.1, D1.4, D2.2, D5.2, H1.2

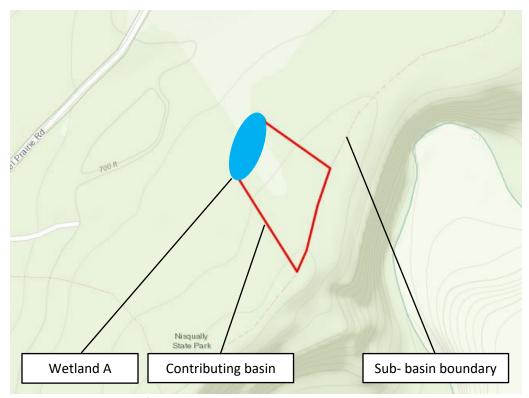


Figure A-3. Map of the contributing basin – D4.3, D5.3

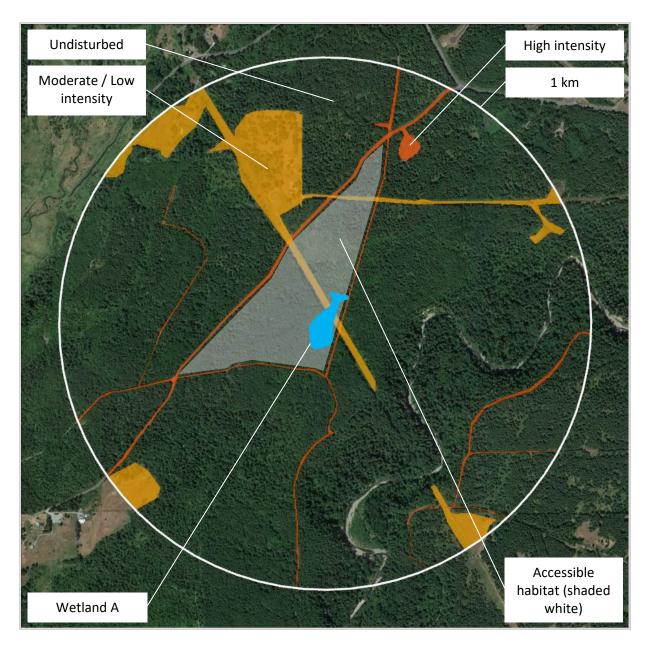


Figure A-4. Undisturbed habitat and moderate-low intensity land uses within 1 km from wetland edge including polygon for accessible habitat – H2.1, H2.2, H2.3

Wetland C (Depressional)

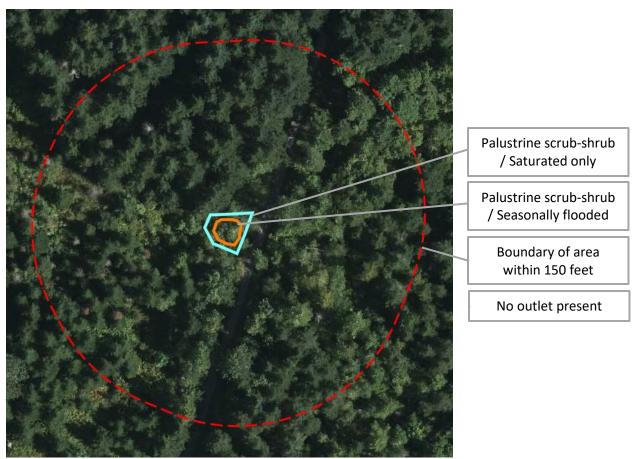


Figure C-1. Cowardin plant classes, hydroperiods, outlet, and 150-foot area – D1.3, H1.1, H1.4, D1.1, D1.4, D2.2, D5.2, H1.2

Wetland RR (Depressional)

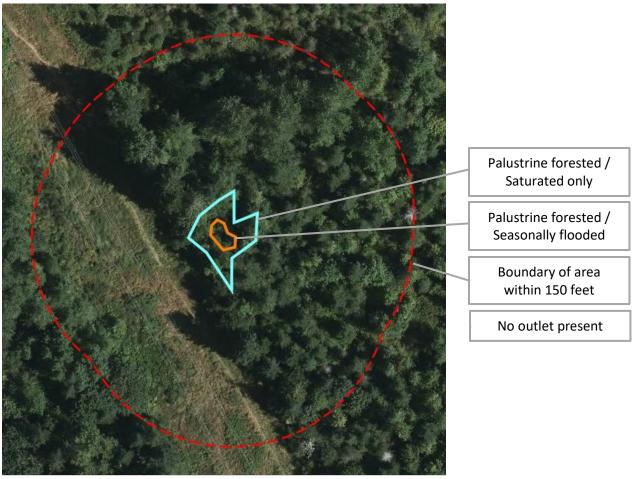


Figure RR-1. Cowardin plant classes, hydroperiods, outlet, and 150-foot area – D1.3, H1.1, H1.4, D1.1, D1.4, D2.2, D5.2, H1.2

Wetland SS (Depressional)

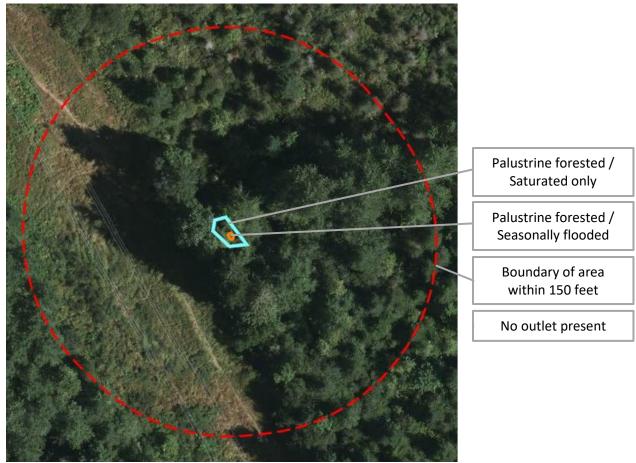


Figure SS-1. Cowardin plant classes, hydroperiods, outlet, and 150-foot area – D1.3, H1.1, H1.4, D1.1, D1.4, D2.2, D5.2, H1.2

Wetland TT (Depressional)

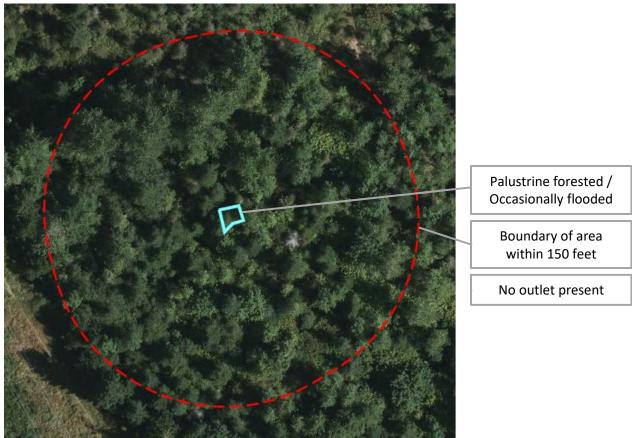


Figure TT-1. Cowardin plant classes, hydroperiods, outlet, and 150-foot area – D1.3, H1.1, H1.4, D1.1, D1.4, D2.2, D5.2, H1.2

Wetland UU (Depressional)

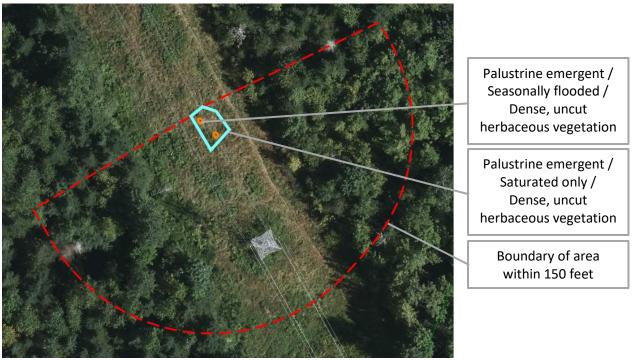


Figure UU-1. Cowardin plant classes, hydroperiods, plant cover of dense and rigid trees, shrubs, and herbaceous plants, and 150-foot area – H1.1, H1.4, H1.2, S1.3, S2.1, S5.1, S4.1

Wetland VV (Depressional)

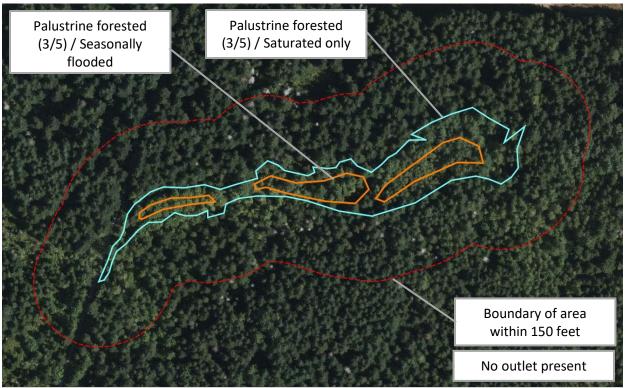


Figure VV-1. Cowardin plant classes, hydroperiods, outlet, and 150-foot area – D1.3, H1.1, H1.4, D1.1, D1.4, D2.2, D5.2, H1.2

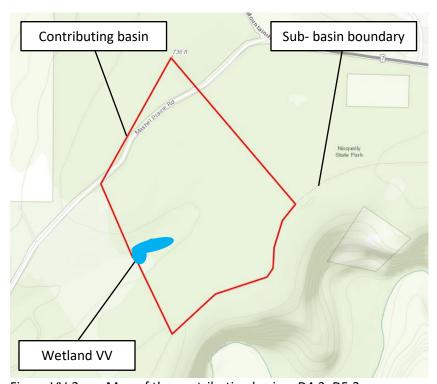


Figure VV-2. Map of the contributing basin – D4.3, D5.3

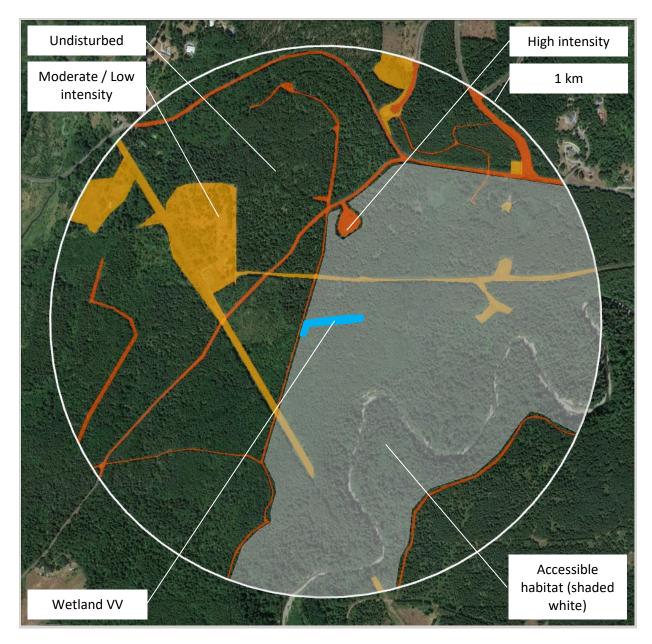


Figure VV-3. Undisturbed habitat and moderate-low intensity land uses within 1 km from wetland edge including polygon for accessible habitat – H2.1, H2.2, H2.3

Wetland WW (Depressional)

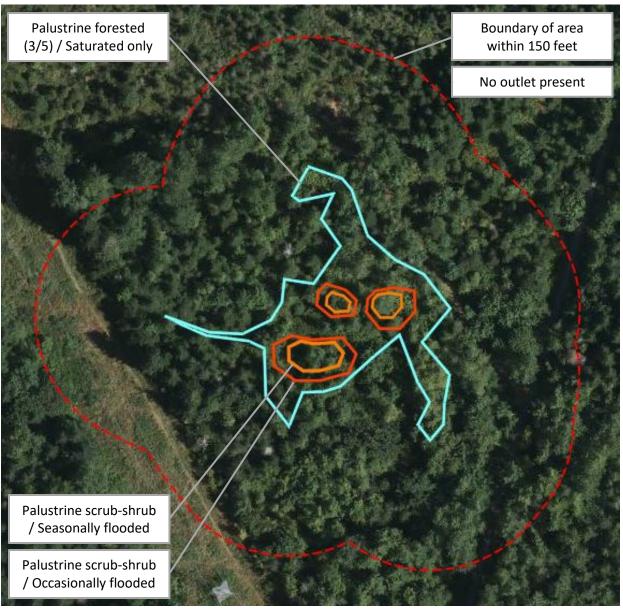


Figure WW-1. Cowardin plant classes, hydroperiods, outlet, and 150-foot area – D1.3, H1.1, H1.4, D1.1, D1.4, D2.2, D5.2, H1.2

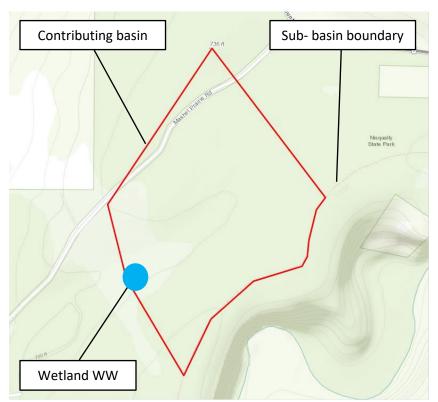


Figure WW-2. Map of the contributing basin – D4.3, D5.3

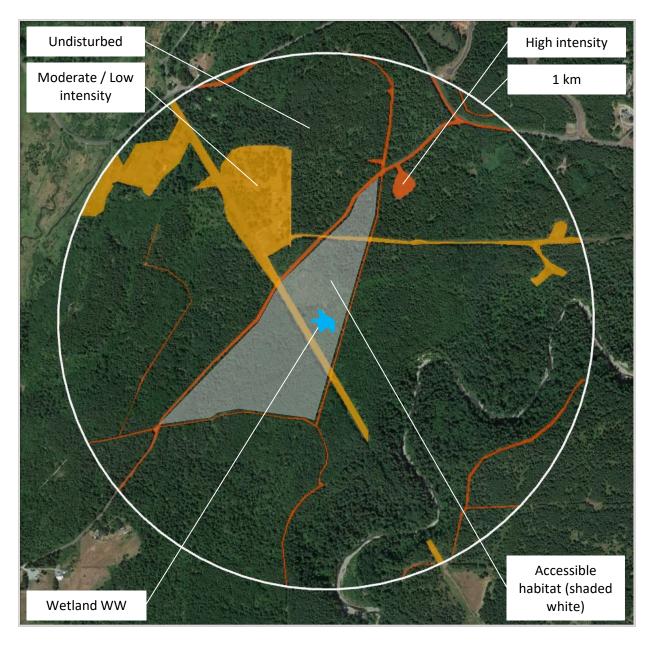


Figure WW-3. Undisturbed habitat and moderate-low intensity land uses within 1 km from wetland edge including polygon for accessible habitat – H2.1, H2.2, H2.3

Wetland XX (Depressional)

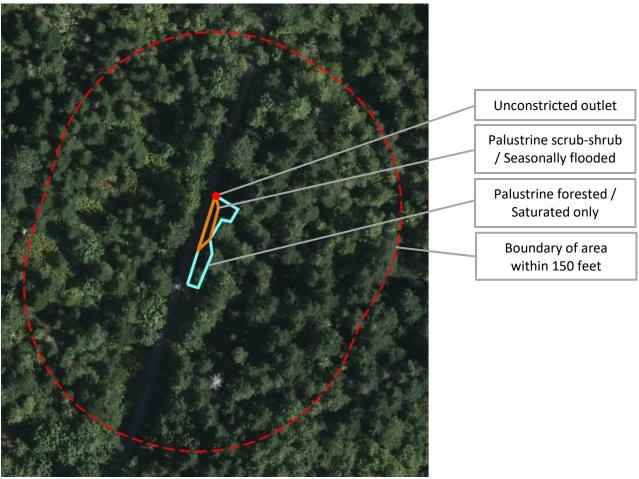


Figure XX-1. Cowardin plant classes, hydroperiods, outlet, and 150-foot area – D1.3, H1.1, H1.4, D1.1, D1.4, D2.2, D5.2, H1.2

INDIVIDUAL WETLAND RATING FIGURES

AREA 7 - OVERLOOK AND LOOP TRAIL

Wetland B

Wetland Z

Wetland NN

Wetland YY

Wetland ZZ

Wetland AAA

Wetland BBB

Wetland B (Depressional)

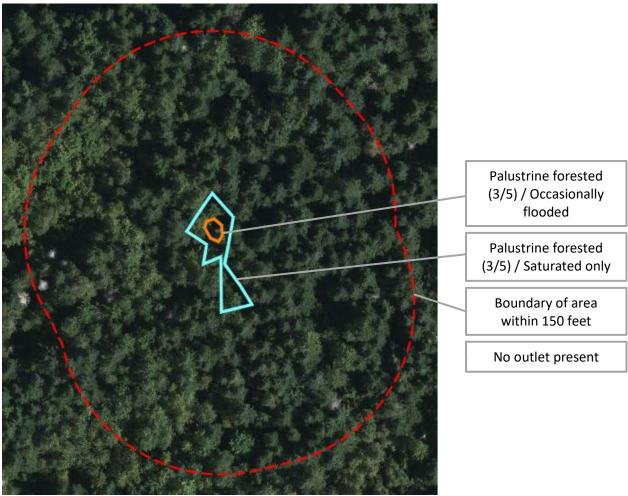


Figure B-1. Cowardin plant classes, hydroperiods, outlet, and 150-foot area – D1.3, H1.1, H1.4, D1.1, D1.4, D2.2, D5.2, H1.2

Wetland Z (Depressional)

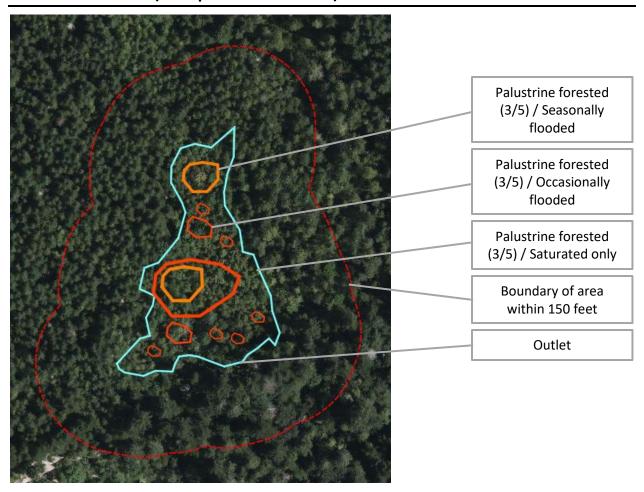


Figure Z-1. Cowardin plant classes, hydroperiods, outlet, and 150-foot area – D1.3, H1.1, H1.4, D1.1, D1.4, D2.2, D5.2, H1.2

Wetland NN (Depressional)

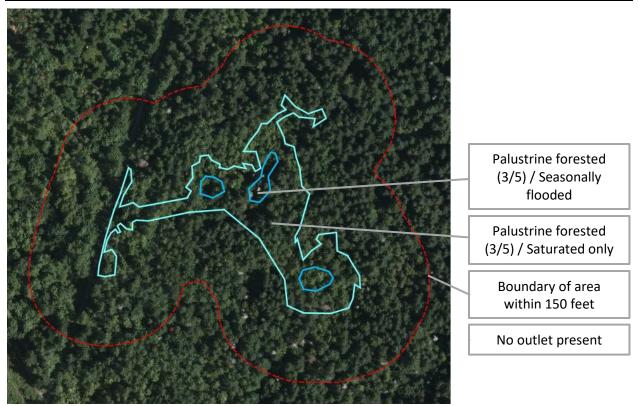


Figure NN-1. Cowardin plant classes, hydroperiods, outlet, and 150-foot area – D1.3, H1.1, H1.4, D1.1, D1.4, D2.2, D5.2, H1.2

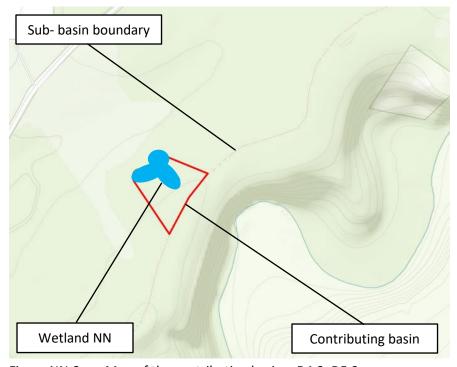


Figure NN-2. Map of the contributing basin – D4.3, D5.3

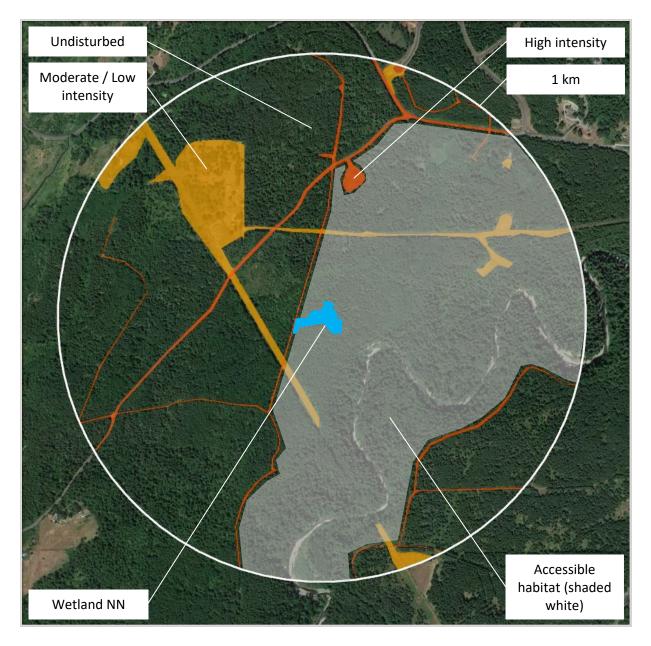


Figure NN-3. Undisturbed habitat and moderate-low intensity land uses within 1 km from wetland edge including polygon for accessible habitat – H2.1, H2.2, H2.3

Wetland YY (Depressional)

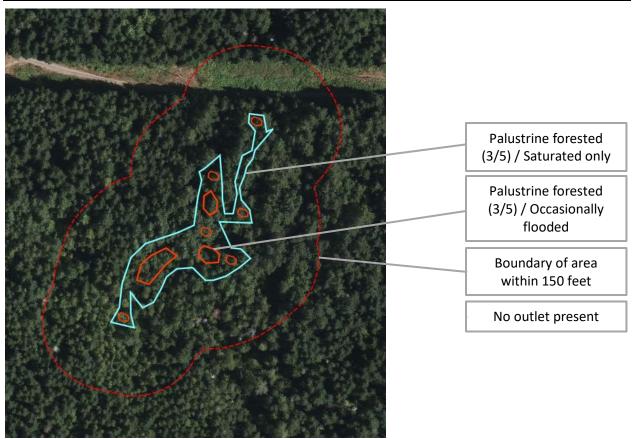


Figure YY-1. Cowardin plant classes, hydroperiods, outlet, and 150-foot area – D1.3, H1.1, H1.4, D1.1, D1.4, D2.2, D5.2, H1.2

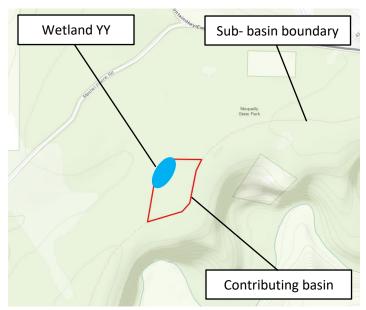


Figure YY-2. Map of the contributing basin – D4.3, D5.3

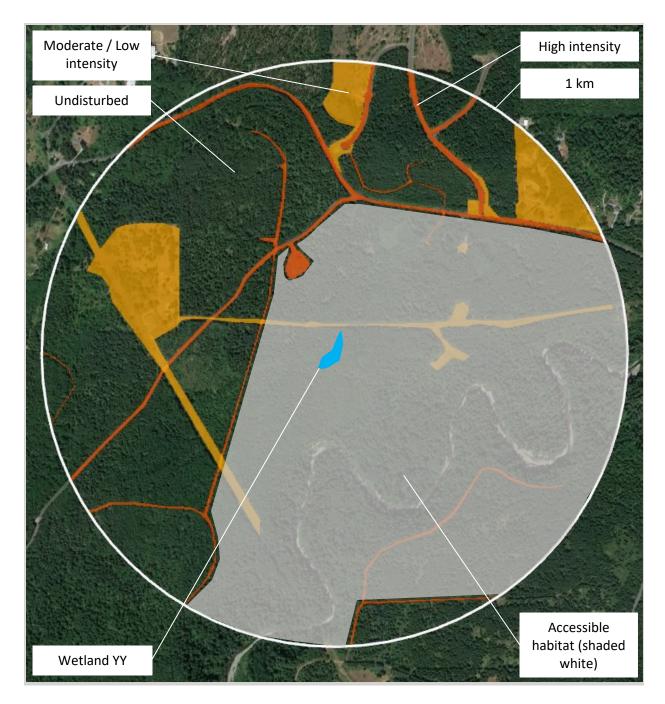


Figure YY-3. Undisturbed habitat and moderate-low intensity land uses within 1 km from wetland edge including polygon for accessible habitat – H2.1, H2.2, H2.3

Wetland ZZ (Depressional)

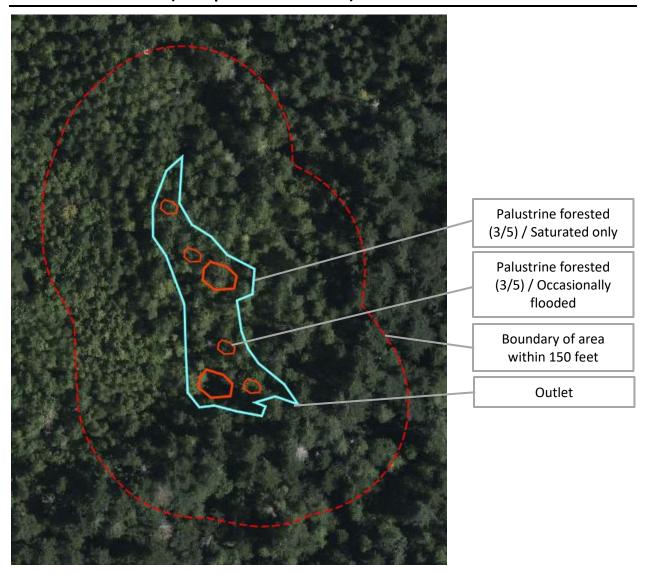


Figure ZZ-1. Cowardin plant classes, hydroperiods, outlet, and 150-foot area – D1.3, H1.1, H1.4, D1.1, D1.4, D2.2, D5.2, H1.2

Wetland AAA (Depressional)

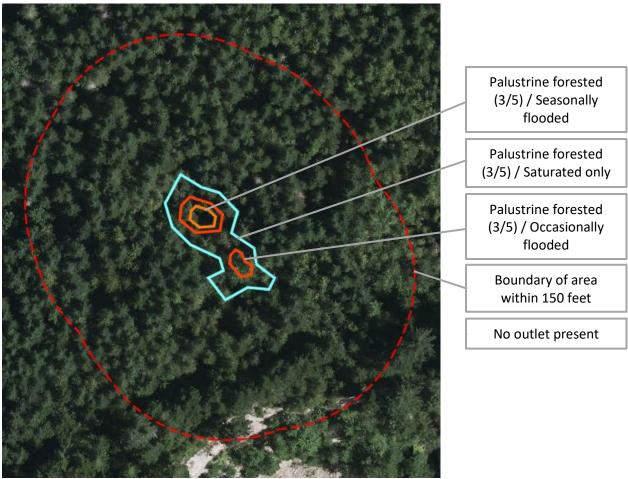


Figure AAA-1. Cowardin plant classes, hydroperiods, outlet, and 150-foot area – D1.3, H1.1, H1.4, D1.1, D1.4, D2.2, D5.2, H1.2

Wetland BBB (Depressional)



Figure BBB-1. Cowardin plant classes, hydroperiods, outlet, and 150-foot area – D1.3, H1.1, H1.4, D1.1, D1.4, D2.2, D5.2, H1.2