

Wetland Rating Field Data Form- Western Washington

Background Information:

Name of Rater: V. Jackson/M. Porter Affiliation: NES Date of site visit: 04/01/05

Name of Wetland (if known): Wetland FF revised (11-4-08)

Government Jurisdiction of Wetland: COB., Army Corps of Engineers, Dept. of Ecology

Location (attach map with outline of wetland to rating form):

¼Section: NE Section: 12 Township: 37N Range: 02E

SUMMARY OF RATING

Category based on FUNCTIONS provided by wetland: I II III IV

Category I = Score >70

Category II = Score 51-69

Category III = Score 30-50

Category IV = Score < 30

Score for Water Quality Functions

5

Score for Hydrologic Functions

10

Score for Habitat Functions

21

TOTAL score for Functions

36

Category based on SPECIAL CHARACTERISTICS of wetland

I II III Does not apply

III

Final Category (choose the "highest" category from above)

Check the appropriate type and class of wetland being rated.

WETLAND TYPE

WETLAND CLASS

Estuarine

Depressional

Natural Heritage Wetland

Riverine

Bog

Lake-fringe

Mature Forest

Slope

Old Growth Forest

Flats

Coastal Lagoon

Freshwater Tidal

Interdunal

None of the Above

Does the wetland being rated meet any of the criteria below?

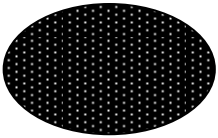
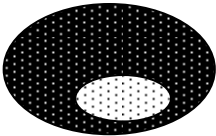
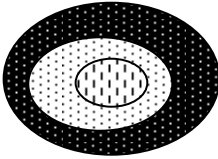
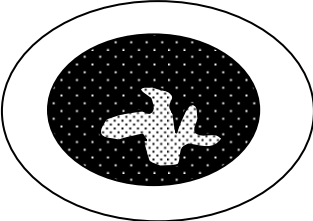
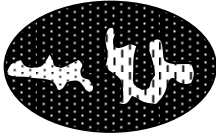


If the answer to any of the questions below is YES than the wetland will need to be protected according to the regulations regarding the special characteristics found in the wetland.

Check List for Wetlands That Need Special Protection, and That Are Not Included in the Rating	YES	NO
<p>SP1. <i>Has the wetland been documented as a habitat for any Federally listed Threatened or Endangered animal or plant species (T/E species)?</i> For the purposes of this rating system, “documented” means the wetland is on the appropriate state or federal database. Not in database</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>SP2. <i>Has the wetland been documented as habitat for any State listed Threatened or Endangered animal species? See EIS Plant and Animal Tech report</i> For the purpose of this rating system, “documented” means the wetland is on the appropriate state database. Not in database</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>SP3. <i>Does the wetland contain individuals of Priority species listed by the WDFW for the state? See EIS Plant and Animal Tech report</i></p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>SP4. <i>Does the wetland have a local significance in addition to its functions?</i> For example, the wetland has been identified in the Shoreline Master Program, the Critical Areas Ordinance, or in a local management plan as having special significance. COB Wildlife Habitat Analysis</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SLOPE WETLANDS		Points
WATER QUALITY FUNCTIONS – Indicators that wetland functions to improve the water quality.		
S1. Does the wetland unit have the <u>potential</u> to improve water quality?		-----
S1.1 Characteristics of the average slope of unit: <input type="checkbox"/> Slope is 1% or less (<i>a 1% slope has a one foot drop in elevation for every 100ft in horizontal distance</i>) 3 pts <input type="checkbox"/> Slope is 1% to 2% 2 pts <input type="checkbox"/> Slope is 2% to 5% 1 pt <input checked="" type="checkbox"/> Slope is greater than 5% 0 pts		0
S1.2 The soil two inches below the surface (or duff layer) is clay or organic (<i>use NRCS definitions</i>). <input checked="" type="checkbox"/> YES 3 pts <input type="checkbox"/> NO 0 pts		3
S1.3 Characteristics of vegetation in the wetland that trap sediments and pollutants: <i>Choose the points appropriate for the description that best fits the vegetation in the wetland. Dense vegetation means you have trouble seeing the soil surface (>75% cover), and uncut means not grazed or mowed and plants are higher than six inches. .</i> <input type="checkbox"/> Dense, un-grazed, herbaceous vegetation in >90% of the area 6 pts <input type="checkbox"/> Dense, un-grazed, herbaceous > ½ of the area 3 pts <input checked="" type="checkbox"/> Dense, woody, vegetation in > ½ of the area 2 pts <input type="checkbox"/> Dense, un-grazed, herbaceous vegetation in < ¼ of the area 1 pt <input type="checkbox"/> Does not meet any of the criteria above for vegetation 0 pts		2
Total for S1 <i>Add the points in the boxes above</i>		5
S2. Does the wetland unit have the <u>opportunity</u> to improve water quality? Answer YES if you know or believe there are pollutants in groundwater or surface water coming into the wetland that would otherwise reduce water quality in streams, lakes, or groundwater down-gradient from the wetland. <i>Note which of the following conditions provide the sources of pollutants. A unit may have pollutants coming from several sources, but any single source would qualify as opportunity.</i> <input type="checkbox"/> Grazing in the wetland or within 150 feet <input type="checkbox"/> Untreated stormwater discharges to the wetland <input type="checkbox"/> Tilled fields or orchards within 150 feet of the wetland <input type="checkbox"/> Residential, urban areas, or golf courses are within 150 feet of wetland <input type="checkbox"/> Other YES = multiplier is 2 NO = multiplier is 1		Multiplier =1
Total- Water Quality Functions <i>Multiply the score from S1 by S2</i> <i>Add the score to the table on page 1</i>		5

SLOPE WETLANDS		Points
HYDROLOGIC FUNCTIONS- Indicators that wetland functions to reduce flooding and stream degradation.		
S3. Does the wetland unit have the <u>potential</u> to reduce flooding and stream erosion?		-----
S3.1 Characteristics of vegetation that reduce the velocity of surface flows during storms. <i>Choose the points appropriate for the description that best fit conditions in the wetland (stems of plants should be thick enough (usually >1/8 inch), or dense enough, to remain erect during surface flows).</i>		3
<input type="checkbox"/>	Dense, uncut, rigid , vegetation covers >90% of the area of the wetland	6 pts
<input checked="" type="checkbox"/>	Dense, uncut, rigid vegetation > ½ area	3 pts
<input type="checkbox"/>	Dense, uncut, rigid vegetation > ¼ area	1 pt
<input type="checkbox"/>	More than ¼ of the area is grazed, mowed, tilled, or vegetation is not rigid	0 pts
S3.2 Characteristic of slope wetlands that hold back small amounts of flood flows: The slope wetland has small surface depressions that can retain water over at least 10% of its area? <u>YES</u> 2 pts NO 0 pts		2
Total for D3 <i>Add the points in the boxes above</i>		5
S4. Does the wetland unit have the <u>opportunity</u> to reduce flooding and erosion? Is the wetland in a landscape position where the reduction in water velocity it provides helps protect downstream property and aquatic resources from flooding or excessive and/or erosive flows? <i>Note which of the following indicators of opportunity apply.</i>		Multiplier =2
<input checked="" type="checkbox"/>	Wetland has surface runoff that drains to a river or stream that has flooding problems	
<input type="checkbox"/>	Other	
Answer NO if the major source of water is controlled by a reservoir (e.g. the wetland is a seep that is on the downstream side of a dam) YES = multiplier is 2 NO = multiplier is 1		
Total- Hydrologic Functions <i>Multiply the score from S3 by S4</i> <i>Add score to table on page 1</i>		10

<p style="text-align: center;">HABITAT FUNCTIONS</p> <p style="text-align: center;">Indicators that the wetland functions to provide important habitat</p>	<p style="text-align: center;">Points</p>																								
<p>H1 Does the wetland unit have the <u>potential</u> to provide habitat for many species?</p>	<p style="text-align: center;">-----</p>																								
<p>H1.1 Vegetation structure <i>Check the types of vegetation classes present (as defined in Cowardin) - Size threshold for each class is ¼ acre or more than 10% of the area if unit is smaller than 2.5 acres.</i></p> <p><input type="checkbox"/> Aquatic bed <input checked="" type="checkbox"/> Emergent plants <input checked="" type="checkbox"/> Scrub/shrub- areas where shrubs have >30% cover <input type="checkbox"/> Forested- areas where trees have >30% cover</p> <p><i>If the unit has a forested class, check if:</i> <input type="checkbox"/> Forested areas have three out of five strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the forested polygon</p> <p><i>Add the number of vegetation types that qualify. If you have:</i></p> <table style="width: 100%; border: none;"> <tr> <td style="text-align: right;">4 or more structures</td> <td style="text-align: right;">4 pts</td> </tr> <tr> <td style="text-align: right;">3 structures</td> <td style="text-align: right;">2 pts</td> </tr> <tr> <td style="text-align: right;">2 structures</td> <td style="text-align: right;">1 pt</td> </tr> <tr> <td style="text-align: right;">1 structure</td> <td style="text-align: right;">0 pts</td> </tr> </table>	4 or more structures	4 pts	3 structures	2 pts	2 structures	1 pt	1 structure	0 pts	<p style="text-align: center;">1</p>																
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<p>H1.2 Hydroperiods <i>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 acre to count.</i></p> <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> Permanently flooded or inundated</td> <td style="text-align: right;">4 or more present</td> <td style="text-align: right;">3 pts</td> </tr> <tr> <td><input type="checkbox"/> Seasonally flooded or inundated</td> <td style="text-align: right;">3 present</td> <td style="text-align: right;">2 pts</td> </tr> <tr> <td><input type="checkbox"/> Occasionally flooded or inundated</td> <td style="text-align: right;">2 present</td> <td style="text-align: right;">1 pt</td> </tr> <tr> <td><input checked="" type="checkbox"/> Saturated only</td> <td style="text-align: right;">1 present</td> <td style="text-align: right;">0 pts</td> </tr> <tr> <td><input type="checkbox"/> Permanently flowing stream or river in, or adjacent to, the wetland</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> Seasonally flowing stream in, or adjacent to, the wetland</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> Lake-fringe wetland</td> <td></td> <td style="text-align: right;">2 pts</td> </tr> <tr> <td><input type="checkbox"/> Freshwater tidal wetland</td> <td></td> <td style="text-align: right;">2 pts</td> </tr> </table>	<input type="checkbox"/> Permanently flooded or inundated	4 or more present	3 pts	<input type="checkbox"/> Seasonally flooded or inundated	3 present	2 pts	<input type="checkbox"/> Occasionally flooded or inundated	2 present	1 pt	<input checked="" type="checkbox"/> Saturated only	1 present	0 pts	<input type="checkbox"/> Permanently flowing stream or river in, or adjacent to, the wetland			<input type="checkbox"/> Seasonally flowing stream in, or adjacent to, the wetland			<input type="checkbox"/> Lake-fringe wetland		2 pts	<input type="checkbox"/> Freshwater tidal wetland		2 pts	<p style="text-align: center;">0</p>
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<p>H1.3 Richness of Plant Species Count the number of plant species in the wetland that cover at least 10 square feet. (<i>Different patches of the same species can be combined to meet the size threshold</i>) <i>You do not have to name the species.</i> Do not include Eurasian Milfoil, reed canary grass, purple loosestrife, or Canadian thistle</p> <p>Number of Species Counted:</p> <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> >19 species</td> <td style="text-align: right;">2 pts</td> </tr> <tr> <td><input checked="" type="checkbox"/> 5-19 species</td> <td style="text-align: right;">1 pt</td> </tr> <tr> <td><input type="checkbox"/> <5 species</td> <td style="text-align: right;">0 pts</td> </tr> </table> <p>List of species counted (not required):</p>	<input type="checkbox"/> >19 species	2 pts	<input checked="" type="checkbox"/> 5-19 species	1 pt	<input type="checkbox"/> <5 species	0 pts	<p style="text-align: center;">1</p>																		
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<p>H1.4 Interspersion of Habitats Decide from the diagrams below, whether interspersions between types of vegetation (described in H1.1), or vegetation types and un-vegetated areas (can include open water or mudflats) is high, medium, low, or none.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>None = 0 points</p> </div> <div style="text-align: center;">  <p>Low = 1 point</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div> <p style="text-align: center; margin-top: 10px;">Moderate = 2 points</p> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> <div style="text-align: center;">  <p>(Riparian braided channels)</p> </div> </div> <p style="text-align: center; margin-top: 10px;">High = 3 points</p> <p style="margin-top: 20px;">NOTE: If you have four or more classes or three vegetation classes and open water, the rating is always "high".</p>	<p>Points</p> <p>2</p>
<p>H1.5 Special Habitat Features Check the habitat features that are present in the wetland. The number of checks is the number of points you put into the points column.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Large, downed, woody debris within the wetland (>4 inches diameter and 6ft long) <input checked="" type="checkbox"/> Standing snags in the wetland (diameter at bottom >4 inches) <input type="checkbox"/> Undercut banks are present for at least 6.6ft (2m) and/or overhanging vegetation which extends at least 3.3ft (1m) over a stream for at least 33 ft (10m) <input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (>30degree slope) OR signs of recent beaver activity are present <input type="checkbox"/> At least ¼ acre of thin-stemmed persistent vegetation or woody branches are present in area that are permanently or seasonally inundated (structures for egg-laying by amphibians) <input checked="" type="checkbox"/> Invasive plants cover less than 25% of the wetland area in each stratum of plants 	<p>2</p>
<p>H1. Total Score – potential for providing habitat <i>Add the scores in all H1 columns above</i></p>	<p>6</p>

Comments:

H2. Does the wetland unit have the <u>opportunity</u> to provide habitat for many species?	Points
<p>H2.1 Buffers <i>Choose the description that best represents the condition of the buffer of the wetland unit. The highest scoring criterion that applies to the wetland is to be used in the rating.</i></p> <p><input checked="" type="checkbox"/> 100m (330ft) of relatively undisturbed vegetated areas, rocky areas, or open water >95% circumference. No structures are within undisturbed part of buffer. (Relatively undisturbed also means no-grazing, no landscaping, no daily human use.) 5 pts</p> <p><input type="checkbox"/> 100m (330ft) of relatively undisturbed vegetated areas, rocky areas, or open water >50% circumference. 4 pts</p> <p><input type="checkbox"/> 50m (170ft) of relatively undisturbed vegetated areas, rocky areas, or open water >95% circumference. 4 pts</p> <p><input type="checkbox"/> 100m (330ft) of relatively undisturbed vegetated areas, rocky areas, or open water >25% circumference. 3 pts</p> <p><input type="checkbox"/> 50m (170ft) of relatively undisturbed vegetated areas, rocky areas, or open water >50% circumference. 3 pts</p> <p style="text-align: center;">If the buffer does not meet any of the above criteria</p> <p><input type="checkbox"/> No paved areas (except paved trails) or buildings within 25m (80ft) of wetland >95% circumference. Light to moderate grazing, or lawns are OK. 2 pts</p> <p><input type="checkbox"/> No paved areas or buildings within 50m of wetland for >50% circumference. Light to moderate grazing, or lawns are OK. 2 pts</p> <p><input type="checkbox"/> Heavy grazing in the buffer. 1 pt</p> <p><input type="checkbox"/> Vegetated buffers are <2m wide (6.6ft) for more than 95% of the circumference (e.g. tilled fields, paving, basalt bedrock extend to edge of wetland). 0 pts</p> <p><input type="checkbox"/> Buffer does not meet any of the criteria above. 1 pt</p>	
<p>H2.2 Corridors and Connections</p> <p>H2.2.1 Is the wetland part of a relatively undisturbed and unbroken vegetated corridor (either riparian or upland) that is at least 150ft wide, has at least 30% cover of shrubs, forest, or native undisturbed prairie, that connects to estuaries, other wetlands, or undisturbed uplands that are at least 250 acres in size? Dams in riparian corridors, heavily used gravel roads, and paved roads are considered breaks in the corridor.</p> <p style="text-align: center;">YES = 4 points (go to question H 2.3) NO = go to question H2.2.2</p> <p>H2.2.2 Is the wetland part of a relatively undisturbed and unbroken vegetated corridor (either riparian or upland) that is at least 50ft wide, has at least 30% cover of shrubs or forest, and connects to estuaries, other wetlands, or undisturbed uplands that are at least 25 acres in size? OR a Lake-fringe wetland, if it does not have an undisturbed corridor as in the question above.</p> <p style="text-align: center;">YES = 2 points (go to question H2.3) NO = go to question H2.2.3.</p> <p>H2.2.3 Is the wetland:</p> <p><input type="checkbox"/> within five miles (8km) of a brackish or salt water estuary OR</p> <p><input type="checkbox"/> within three miles of a large field or pasture (>40 acres) OR</p> <p><input type="checkbox"/> within one mile of a lake greater than 20 acres?</p> <p style="text-align: center;">YES = 1 point NO = 0 points</p>	4

H2.3 Near or adjacent to other priority habitats listed by WDFW (<i>updated Oct 2008</i>)	Points								
Which of the following priority habitats are within 330ft (100m) of the wetland unit? <i>NOTE: the connections do not have to be relatively undisturbed.</i>									
<input type="checkbox"/> Aspen Stands: Pure or mixed stands of aspen greater than 0.4ha (1 acre).	1								
<input checked="" type="checkbox"/> Biodiversity Areas and Corridors: Areas of habitat that are relatively important to various species of native fish and wildlife. (Full description in WDFW PHS report p. 152).									
<input type="checkbox"/> Herbaceous Balds: Variable size patches of grass and forbs on shallow soils over bedrock.									
<input type="checkbox"/> 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 20 trees/ha (8 trees/acre) which are >81 cm (32 in) dbh or > 200 yrs of age. Mature Forests- Stands with average diameters exceeding 53 cm (21 in) dbh; crown cover may be less than 100% ; decay, decadence, numbers of snags, and quality of large downed material is generally less than that found in old-growth; 80-200 yr old west of the Cascade crest.									
<input type="checkbox"/> Oregon White Oak: Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (full description in WDFW PHS report p. 158)									
<input type="checkbox"/> Riparian: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.									
<input type="checkbox"/> Westside Prairies: Herbaceous, non-forested plant communities that can either take the form of a dry prairie or wet prairie (full description in WDFW PHS report p. 161).									
<input type="checkbox"/> 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.									
<input type="checkbox"/> Nearshore: Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and Puget Sound Nearshore (full description in WDFW PHS report p. 167-169, and glossary in Appendix A).									
<input type="checkbox"/> 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.									
<input type="checkbox"/> Cliffs: Greater than 7.6 m (25ft) high and occurring below 5000ft.									
<input type="checkbox"/> Talus: Homogeneous areas of rock rubble ranging in average size from 0.15 to 2.0 m (0.5 to 6.5ft), composed as basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.									
<input type="checkbox"/> 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 DBH of >51 cm (20 in) in Western Washington and are >2M (6.5 ft) in height. Priority logs are >30 cm (12 in) in diameter at the largest end and >6 m (20 ft) long.									
<table style="width: 100%; border: none;"> <tr> <td style="padding-left: 100px;">If the wetland has 3 or more priority habitats</td> <td style="text-align: right;">4 pts</td> </tr> <tr> <td style="padding-left: 100px;">2 priority habitats</td> <td style="text-align: right;">3 pts</td> </tr> <tr> <td style="padding-left: 100px;">1 priority habitat</td> <td style="text-align: right;">1 pt</td> </tr> <tr> <td style="padding-left: 100px;">no priority habitats</td> <td style="text-align: right;">0 pts</td> </tr> </table>		If the wetland has 3 or more priority habitats	4 pts	2 priority habitats	3 pts	1 priority habitat	1 pt	no priority habitats	0 pts
If the wetland has 3 or more priority habitats	4 pts								
2 priority habitats	3 pts								
1 priority habitat	1 pt								
no priority habitats	0 pts								

<p>H2.4 Wetland Landscape Choose the one description of the landscape around the wetland that best fits.</p> <p><input checked="" type="checkbox"/> There are at least three other wetlands within ½ mile, and the connections between them are relatively undisturbed (light grazing between wetlands OK, as is lake shore with some boating, but connections should NOT be bisected by paved roads, fill, field, or other development). 5 pts</p> <p><input type="checkbox"/> The wetland is Lake-fringe on a lake with little disturbance and there are three other lake-fringe wetlands within ½ mile. 5 pts</p> <p><input type="checkbox"/> There are at least three other wetlands with in ½ mile, BUT the connection between them is disturbed. 3 pts</p> <p><input type="checkbox"/> The wetland is Lake-fringe on a lake WITH disturbance and there are three other lake-fringe wetlands within ½ mile. 3 pts</p> <p><input type="checkbox"/> There is at least one other wetland within ½ mile. 2 pts</p> <p><input type="checkbox"/> There are no other wetlands within ½ mile. 0 pts</p>	<p>Points 5</p>
<p>H2. Total Score - opportunity to provide habitat <i>Add the scores in all of the H2 columns above</i></p>	<p>15</p>
<p>Total for H1</p>	<p>6</p>
<p>Total Score for Habitat Functions- <i>Add the points from the total H1 and H2 boxes</i> <i>Add the score to table on page 1</i></p>	<p>21</p>