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): AX   (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	16
Score for Habitat Functions	23
TOTAL score for Functions	44

Category based on SPECIAL CHARACTERISTICS of wetland

I ☐ II ☐ III ☐ Does not apply ☒

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

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	☐		

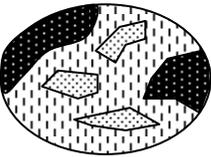**Does the wetland being rated meet any of the criteria below?**

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
SP1. *Has the wetland been documented as a habitat for any Federally listed Threatened or Endangered animal or plant species (T/E species)?* For the purposes of this rating system, "documented" means the wetland is on the appropriate state or federal database.	☐	☒
SP2. *Has the wetland been documented as habitat for any State listed Threatened or Endangered animal species*? **See EIS Plant and Animal Tech report** For the purpose of this rating system, "documented" means the wetland is on the appropriate state database.	☐	☒
SP3. *Does the wetland contain individuals of Priority species listed by the WDFW for the state?* **See EIS Plant and Animal Tech report**	☒	☐
SP4. *Does the wetland have a local significance in addition to its functions?* 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**	☒	☐

DEPRESSIONAL AND FLATS WETLANDS	Points
Water Quality Functions – Indicators that wetland functions to improve the water quality.	
D1 Does the wetland unit have the <u>potential</u> to improve water quality?	------------
D1.1 Characteristics of surface water which flows out of the wetland: ☐ Unit is a depression with no surface water leaving it (no outlet) 3 pts ☐ Unit has intermittently flowing, or highly constricted permanently flowing outlet 2 pts ☒ Unit has an un-constricted, or slightly constricted, surface outlet (permanently flowing) 1 pt ☐ Unit is a flat depression (Q.7), or in the Flats class, with permanent surface outflow **and no** **obvious natural outlet** and/or outlet is a man-made ditch 1 pt *(If ditch is not permanently flowing, treat unit as intermittently flowing)*	1
D1.2 The soil two inches below the surface (or duff layer) is clay or organic (*use NRCS definitions*) ☐YES 4 pts ☒NO 0 pts	0
D1.3 Characteristics of persistent vegetation (emergent, shrub, and/or forest Cowardin class): ☐ Wetland has persistent, ungrazed, vegetation in >95% of the area 5 pts ☐ Wetland has persistent, ungrazed, vegetation in ≥ ½ of the area 3 pts ☐ Wetland has persistent, ungrazed, vegetation in ≥ 1/10 of the area 1 pt ☒ Wetland has persistent, ungrazed, vegetation in< 1/10 of the area 0 pts	0
D1.4 Characteristics of seasonal ponding or inundation. *This is the area of the wetland unit that is ponded for at least two months, but dries out sometime during the year. Do not count the area that is permanently ponded. Estimate area as the average condition five out of 10 years.* ☒ Area seasonally ponded is > ½ total area of the wetland 4 pts ☐ Area seasonally ponded is > ¼ total area of the wetland 2 pts ☐ Area seasonally ponded is < ¼ total area of the wetland 0 pts	4
Total for D1 *Add the points in the boxes above*	5

D2 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 quality in streams, lakes, or groundwater down gradient from the wetland. *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.*
 	
 ☐ Grazing in the wetland or within 150 feet
 ☐ Untreated stormwater discharges to the wetland
 ☐ Tilled fields or orchards within 150 feet of the wetland
 ☐ A stream or culvert discharges into wetland that drains developed areas, residential areas, farmed fields, roads, or clear-cut logging
 ☐ Residential, urban areas, or golf courses are within 150 feet of wetland
 ☐ Wetland is fed by groundwater high in phosphorus or nitrogen
 ☐ Other
          YES = multiplier is 2   NO = multiplier is 1
	Multiplier =1

<u>Total- Water Quality Functions</u> Multiply the score from D1 by D2 *Add the score to the table on page 1*	5

DEPRESSIONAL AND FLATS WETLANDS	Points

Hydrologic Functions Indicators that wetland functions to reduce flooding and stream degradation.	
D3 Does the wetland unit have the <u>potential</u> to reduce flooding and erosion?	----------
D3.1 Characteristics of surface water flows out of the wetland unit: ☐ Unit is a depression with no surface water leaving (no outlet) 4 pts ☐ Unit has an intermittently flowing, OR highly constricted permanently flowing outlet 2 pts ☐ Unit is flat depression (Q.7), or in the Flats class, with permanent surface outflow **and no obvious natural outlet** and/or outlet is a man-made ditch 1 pt *(If ditch is not permanently flowing, treat unit as intermittently flowing)* ☒ Unit has an un-constricted, or slightly constricted, surface outlet (*permanently flowing*) 0 pts	0
D3.2 Depth of Storage during wet periods *Estimate the height of ponding above the bottom of the outlet. For units with no outlet, measure from the surface of permanent water or deepest part (if dry).* ☐ Marks of ponding are 3 ft or more above the surface or bottom of outlet 7 pts ☐ The wetland is a headwater wetland 5 pts ☐ Marks of ponding between 2 ft to < 3 ft from the surface or bottom of outlet 5 pts ☒ Marks are at least 0.5 ft to < 2 ft from the surface or bottom of outlet 3 pts ☐ Unit is flat (yes to Q.2 or Q.7) but has small depressions on the surface that trap water 1 pt ☐ Marks of ponding less than 0.5 ft 0 pts	3
D3.3 Contribution of wetland unit 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 5 pts ☐ The area of the basin is 10 to 100 times the area of the unit 3 pts ☐ The area of the basin is more than 100 times the area of the unit 0 pt ☐ Entire unit is in the FLATS class 5 pts	5
Total for D3 *Add the points in the boxes above*	8

D4 Does the wetland unit have the <u>opportunity</u> to reduce flooding and erosion?
    Answer YES if the wetland is in a location in the watershed where it provides flood storage, or reduction in water velocity; it helps protect downstream property and aquatic resources from flooding or excessive and/or erosive flows.
    Answer NO if the water coming into the wetland is controlled by a structure such as floodgate, tide gate, flap valve, reservoir, etc.; OR you estimate that more than 90% of the water in the wetland is from groundwater in areas where damaging groundwater flooding does not occur.
    Note which of the following indicators of opportunity apply.
☐ Wetland is in a headwater of a river or stream that has flooding problems
☐ Wetland drains to a river or stream that has flooding problems
☐ Wetland has no outlet and impounds surface runoff water that might otherwise flow into a river or stream that has flooding problems
☒ Other *Wetland documented as isolated by COE, but included based on cumulative storage capacity with all A wetlands.*
             YES = multiplier is 2   NO = multiplier is 1
	Multiplier
	=2

<u>Total- Hydrologic Functions</u> Multiply the score from D3 by D4 *Add score to table on page 1*	16

HABITAT FUNCTIONS	Points
Indicators that the wetland functions to provide important habitat	

H1 Does the wetland unit have the <u>potential</u> to provide habitat for many species?	-----------

H1.1 Vegetation structure | 0

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 that 2.5 acres.

☐ Aquatic bed
☒ Emergent plants
☐ Scrub/shrub- areas where shrubs have >30% cover
☐ Forested- areas where trees have >30% cover

If the unit has a forested class, check if:

☐ Forested areas have three out of five strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the forested polygon

Add the number of vegetation types that qualify. If you have:

	4 or more structures	4 pts
	3 structures	2 pts
	2 structures	1 pt
	1 structure	0 pts

H1.2 Hydroperiods | 1

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.

☐ Permanently flooded or inundated	4 or more present	3 pts
☒ Seasonally flooded or inundated	3 present	2 pts
☐ Occasionally flooded or inundated	2 present	1 pt
☒ Saturated only	1 present	0 pts
☐ Permanently flowing stream or river in, or adjacent to, the wetland		
☐ Seasonally flowing stream in, or adjacent to, the wetland		
☐ **Lake-fringe wetland**		**2 pts**
☐ **Freshwater tidal wetland**		**2 pts**

H1.3 Richness of Plant Species | 0

Count the number of plant species in the wetland that cover at least 10 square feet. *(Different patches of the same species can be combined to meet the size threshold)*
You do not have to name the species.
Do no include Eurasian Milfoil, reed canary grass, purple loosestrife, or Canadian thistle

Number of Species Counted:

☐ >19 species	2 pts
☐ 5-19 species	1 pt
☒ <5 species	0 pts

List of species counted (not required):

H1.4 Interspersion of Habitats	1

H1.4 Interspersion of Habitats

Decide from the diagrams below, whether interspersion between Cowardin vegetation classes (described in H1.1), or the classes and un-vegetated areas (can include open water or mudflats) is high, medium, low, or none.
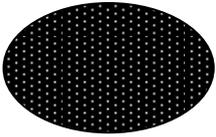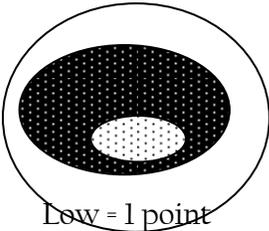
None = 0 points   Low = 1 point
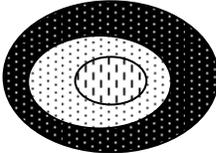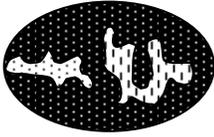
Moderate = 2 points

(Riparian braided channels)

High = 3 points

NOTE: If you have four or more classes or three vegetation classes and open water, the rating is always "high".

H1.5 Special Habitat Features   0

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.

☐ Large, downed, woody debris within the wetland (>4 inches diameter and 6ft long)

☐ Standing snags in the wetland (diameter at bottom >4 inches)

☐ 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)

☐ 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

☐ 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)

☐ Invasive plants cover less than 25% of the wetland area in each stratum of plants

H1. Total Score – potential for providing habitat   2

Add the scores in all H1 columns above

Comments:

H2. Does the wetland unit have the <u>opportunity</u> to provide habitat for many species?	Points
H2.1 Buffers *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. See text for definition of "undisturbed."* ☒ 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** ☐ 100m (330ft) of relatively undisturbed vegetated areas, rocky areas, or open water >50% circumference. **4 pts** ☐ 50m (170ft) of relatively undisturbed vegetated areas, rocky areas, or open water >95% circumference. **4 pts** ☐ 100m (330ft) of relatively undisturbed vegetated areas, rocky areas, or open water >25% circumference. **3 pts** ☐ 50m (170ft) of relatively undisturbed vegetated areas, rocky areas, or open water >50% circumference. **3 pts** **If the buffer does not meet any of the above criteria** ☐ 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** ☐ No paved areas or buildings within 50m of wetland for >50% circumference. Light to moderate grazing, or lawns are OK. **2 pts** ☐ Heavy grazing in the buffer. **1 pt** ☐ 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** ☐ Buffer does not meet any of the criteria above. **1 pt**	5
H2.2 Corridors and Connections **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. <u>YES = **4 points** (go to question H 2.3)</u> NO = go to question H2.2.2 **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. YES = **2 points** (go to question H2.3) NO = go to question H2.2.3. **H2.2.3** Is the wetland: ☐ within five miles (8km) of a brackish or salt water estuary OR ☐ within three miles of a large field or pasture (>40 acres) OR ☐ within one mile of a lake greater than 20 acres? YES = **1 point** NO = **0 points**	4

	Points
H2.3 Near or adjacent to other priority habitats listed by WDFW *(updated Oct 2008)*	
Which of the following priority habitats are within 330ft (100m) of the wetland unit?	
NOTE: the connections do not have to be relatively undisturbed.	

☐ **Aspen Stands**: Pure or mixed stands of aspen greater than 0.4ha (1 acre).

☒ **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).

☐ **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 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.

☐ **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)

☐ **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 wet prairie (full description in WDFW PHS report p. 161).

☐ **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 description in WDFW PHS report p. 167-169, and glossary in Appendix A).

☐ **Caves**: A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice or other geological formations and is large enough to contain a human.

☐ **Cliffs**: Greater than 7.6 m (25ft) high and occurring below 5000ft.

☐ **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.

☐ **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.

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**

Points: 1

	Points
H2.4 Wetland Landscape (*see p.85*) Choose the one description of the landscape around the wetland that best fits. ☒ 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** ☐ The wetland is Lake-fringe on a lake with little disturbance and there are three other lake-fringe wetlands within ½ mile. **5 pts** ☐ There are at least three other wetlands with in ½ mile, BUT the connection between them is disturbed. **3 pts** ☐ The wetland is Lake-fringe on a lake WITH disturbance and there are three other lake-fringe wetlands within ½ mile. **3 pts** ☐ There is at least one other wetland within ½ mile. **2 pts** ☐ There are no other wetlands within ½ mile. **0 pts**	5
H2. Total Score - **opportunity to provide habitat** *Add the scores in all of the H2 columns above*	15
Total for H1	8
Total Score for Habitat Functions- *Add the points from the total H1 and H2 boxes* *Add the score to table on page 1*	23