## **EXHIBIT 23**

# TRANSFER OF DEVELOPMENT RIGHTS SENDING SITE CRITICAL AREAS REPORT



## Sewall Wetland Consulting, Inc.

PO Box 880 Fall City, WA 98024 Phone: 253-859-0515

May 16, 2024

Fowler Creek Trails LLC 1890 Nelson Siding Road Cle Elum, Washington 98922

RE: Critical Area Report – Fowler Creek Trails Kittitas County, Washington SWC Job #22-181

This report describes our observations of any jurisdictional wetlands, streams and/or buffers on or within 250' of the Fowler Creek Trails property, located in west of Fowler Creek Road in unincorporated Kittitas County, Washington.



Above: Vicinity Map of site



Above: Aerial photograph of the study area from Kittitas Mapsifter website.

Specifically, the site includes 35 existing parcels which include Parcels #382736, #785434, #949861, #949862, #949864, #949865 #949866, #949867, #949868, #949869, #949870, #949871, #949872, #949873, #949874, #949875, #954540, #954541, #954542, #17455, #949563, #949851, #949854, #949855, #949548, #954553, #954552, #954551, #954550, #954549, #954543, #954544, #954545, #954546, & #954547.

The site is approximately 85 acres in size located in the NE ¼ of Section 3, Township 19 North, Range 14 East of the W.M.

The site is accessed off Fowler Creek Road with a gravel access road extending west into the site.

#### **METHODOLOGY**

Ed Sewall of Sewall Wetland Consulting, Inc. inspected the site and areas within 250' of the site between October 10 and October 18, 2022.

The site was reviewed using methodology described in the **Regional** Supplement to the Corps of Engineers Wetland Delineation Manual:

Arid West Region (Version 2.0) (USACOE September 2008) as required by the US Army Corps of Engineers starting in June of 2009. This is the methodology currently recognized by Kittitas County for wetland determinations and delineations. Soil colors were identified using the 1990 Edited and Revised Edition of the Munsell Soil Color Charts (Kollmorgen Instruments Corp. 1990.

Wetlands in Kittitas County are rated using the 2014 Washington State Department of Ecology Washington State *Wetland Rating System for Eastern Washington, 2014 Update* dated June 2014 Publication No. 14-06-018.

The ordinary high water mark (OHWM) of any streams was located based upon the criteria described in the Washington Department of Ecology publication *Determining The Ordinary High Water Mark for Shoreline Management Act Compliance in Washington State* (WADOE Publication 16-06-029, March 2010 revised October 2016).

#### **OBSERVATIONS**

Existing Site Documentation.

Prior to visiting the site, a review of several natural resource inventory maps was conducted. Resources reviewed included the Kittitas Taxsifter website, National Wetland Inventory Map, WDNR Fpars Stream Typing Map, Kittitas County flood & critical areas mapping, WDFW Priority Habitats and Species Maps, and the NRCS Soil Survey online mapping and Data.

#### Kittitas Taxsifter Website

The Kittitas Taxsifter website with streams and wetland layers activated depicts a large (20+ acre) forested, scrub-shrub and emergent wetland across the north and east side of the site. Fowler Creek is depicted on the east side of the site along Fowler Creek Road and a Type N water is depicted south of the site. The site is outside any shoreline areas and has no floodplain areas either.



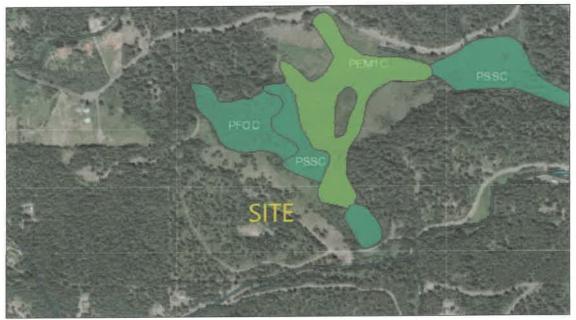
Above: Kittitas County Taxsifter with wetland and stream layers activated.



Above: Kittitas County Taxsifter with shoreline environment layer and floodplain activated.

#### **National Wetlands Inventory (NWI)**

The NWI map depicts the same wetlands as depicted on the County Taxsifter website. The County map is taken from the NWI map these wetland areas were interpreted from aerial photographs by the US Fish and Wildlife Service using 2017 aerial photographs with no ground-truthing.



Above: NWI map of the area of the site

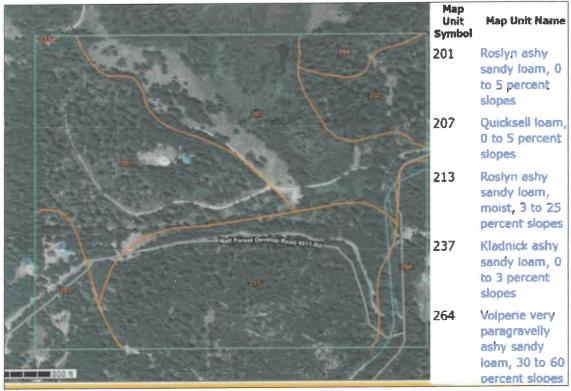
#### Soil Survey

According to the NRCS Soil Mapper website, the site is mapped as containing 4 different soil types including Roslyn ashy sandy loam, Quicksell loam, Kladnick ashy sandy loam, and Volperie paragravelly ashy gravelly loam.

Roslyn soils are well-drained soils formed in glacial drift and alluvium with a mantle of loess and volcanic ash. Quicksell soils are somewhat poorly drained soils formed on stream terraces in old alluvium. Kladnick soils are somewhat excessively drained soils formed in outwash with some volcanic ash. Volperie soils are well drained soils formed in schists with a mantle of volcanic ash.

None of these soil types are considered "hydric" or wetland soils according to the publication *Hydric Soils of the United States* (USDA NTCHS Pub No.1491, 1991).

It should be noted that Western Pacific did a detailed soil study of the area for the project and is mre accurate than the general mapping done by NRCS.



Above: NRCS soil map of the site.

#### **WADNR FPARS website**

According to the WADNR FPARS website with stream types layers activated, Fowler Creek on the east side of the site is depicted as a Type F water. There is also a Type N water depicted on the south side of the site.

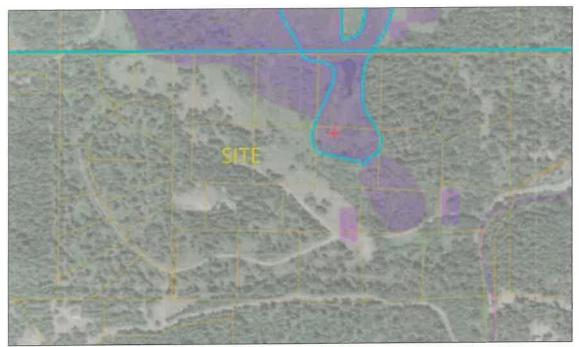


Above: WDNR Fpars Stream Mapping of the area of the site.

#### **WDFW Priority Species and Habitat Map**

The WDFW Priority Species and Habitat map of the area of the site indicates the site contains a wetland, as well as within the Township (light shading) where the Northern Spotted Owl and gray wolf habitat are known to exist. In addition several small rectangles are depicted as shrub steppe.

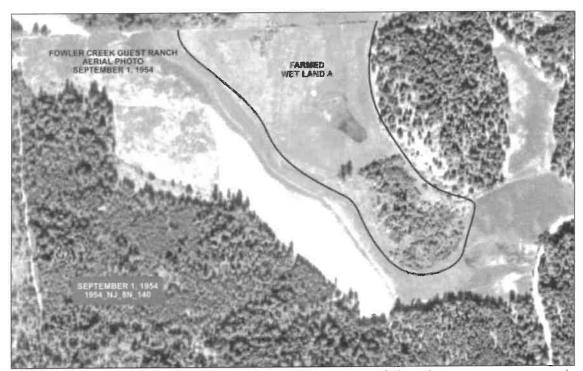
In discussions with WDFW, the applicant was informed that Gray Wolf packs may have wandered through this part of upper Kittitas County in the pats. However there are no current packs within range of the site. WDFW also stated that there are no Spotted Owl circles that overlap onto the site.



Above: WDFW Priority Habitat map of the site.

## 1954 Aerial Photograph of the site

A 1954 aerial photograph of the site obtained from Central Washington University depicts the site at that time as farmland, including almost all of the wetland.



Above: 1954 Aerial photograph of the site.

#### Field observations

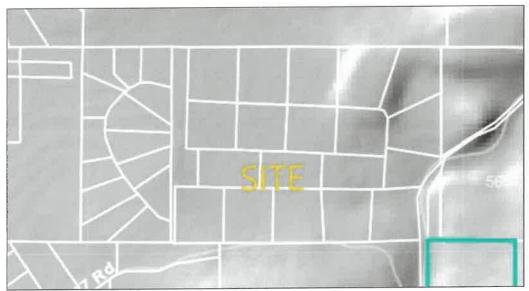
The site contains several gravel roads that pass through and round the site. A single-family home is located on Parcel #949870. There is also cleared lawn and open areas around this parcel. The north side of the site contains large pasture areas used to graze horses. This area has been in agricultural use for many years and contains several drainage and irrigation ditches passing along it. An excavated pond is located on the northeast side of the site within the large wetland area. Piped irrigation is present in the pastures as well as several potable water wells.

The site has a gentle slope to the north towards the wetland. A pronounced hill is located on the northeast corner of the site and contains small schist outcroppings.

The forested portions of the site include an overstory mix of douglas fir, ponderosa pine, tamarack, bitter cherry, shore pine and scattered white pine and tamarack. Much of the site appears to have a mix of planted species from past forest practice and replanting efforts. Understory

species include vine maple, oceanspray, Oregon grape, hawthorne, bracken fern and snowberry.

The pasture areas are a mix of typical pasture grasses consisting primarily of fescue, quackgrass and some timothy as well as weedy species like thistle, yarrow and tansy.



Above: Kittitas Taxsifter depiction of the site with the Lidar layer.

Soil pits excavated throughout the upland portions of the site revealed a dry gravelly, sandy loam with a colors ranging from 10YR 3/2-3/3. No evidence of wetland hydrology was present in the upland areas of the site.

#### Wetlands and Streams

A total of 3 wetlands were found to be on the site and one intermittent stream. In addition, Fowler Creek passes very close to the southeast corner of the site. The following is a description of these areas;

#### Wetland A

Wetland A consists of the south side of a large, forested, scrub-shrub and emergent wetland.

This wetland was flagged with pink wetland flagging labeled A1-A58 and from A1-AA1-AA6.

This wetland has been historically manipulated from past agricultural use as well as ditching, draining and the excavation and berming of a pond in a portion of the wetland. A large irrigation ditch passes along the south side of the wetland in the existing grazed pasture and is a hydrologic break in the feature and in portions of the site, defines the edge. The wetland is also bordered by the main access road into the site, as well as a second old roadbed/berm that extends onto the small hill in this area of the site.

The wetland outlets into a culvert at this roadbed on the east side of the site forming a ditched stream down to a small wetland along Fowler Creek Road (Wetland B).

The forested portions of the wetland contain black cottonwood, red alder, quacking aspen, and scattered western red cedar.

The scrub-shrub portion is comprised of alder saplings and sitka willow, as well a red-osier dogwood. The emergent portion is primarily reed canary grass with a mix of other species including small fruited bulrush, soft rush, timothy, skunk cabbage, hedge nettle, lady fern and several species of sedge.

Soil pits excavated within this wetland revealed a gravelly loam with a B-horizon matrix color of 10YR 3/2 with common, medium, distinct redoximorphic concentrations. Further in the wetland a sapric muck was encountered. Soils were saturated within 6" of the surface at the time of our site visit in the fall and in the center were saturated at the surface.

Using the US Fish and Wildlife Wetland Classification Method (Cowardin et al. 1979), Wetland B would be classified as PFO4C (palustrine, forested, needle leaved evergreen, seasonally flooded) and PSS1C (palustrine, scrub-shrub, broad leaved deciduous, seasonally flooded and PEM1C (palustrine, emergent, persistent seasonally flooded.

Wetland A was rated using the *WADOE Washington State Wetland Rating System for Eastern Washington 2014 update* (Publ No. 14-06-030). This wetland was rated as a depressional wetland and scored a total of 21

points with 9 points for habitat indicating a Category II wetland. According to Kittitas County Municipal Code Chapter 17A.07, Category II wetlands for a low impact land use such as gravel walking trails and open space on existing parcels construction of a single-family homes on existing parcels have a 100' buffer measured from the wetland edge

Table 17A.07.030: Standard Buffer Widths

Category of Wetland	Land Use with Low Impact <sup>1</sup>	Land Use with Moderate Impact <sup>2</sup>	Land Use with High Impact <sup>3</sup>
	125 ft	190 ft	250 ft
orizo dello	100 ft	150 ft	200 ft
with the state of	75 ft	110 ft	150 ft
IV	25 ft	40 ft	50 ft

#### Stream A

Stream A is a ditched channel that exits the culvert draining out of the east end of Wetland A. This stream is 24" wide ditched feature that passes to the east towards Fowler Creek road where it runs along the west side of the road to the east offsite to where it presumably connects to Fowler Creek.

Stream A is a seasonal stream which has been appropriately mapped as a Type Ns water

According to KCMC 17A.04.030.4, Type Ns streams have a 50' buffer measured from the ordinary high water mark in the Cascade Ecoregion area of the county.

	Riparian Management Zone Widths <sup>1,2</sup>			
Stream Type	Cascade Ecoregion (feet)	Columbia Plateau Ecoregion (feet)		
Type S (Shoreline)	See the SMP	See the SMP		
Type F	150	100		
Type Np	100	65		
Type Ns	50	40		

#### Wetland B

Wetland B consists of depressional and slope emergent and forested wetland located on the south side of the existing access roadbed. This wetland was flagged with pink flags B1-B13. This wetland is in the location of a mapped Type N water. However, no stream or stream channel is located in this area and appears to be an aerial photograph interpretation error.

The emergent portion of the wetland is a monotypic stand of reed canary grass with small amounts of small fruited bulrush, and the forested portion consist of small red alders and with little if any understory except some reed canary grass.

Soil pits excavated within this wetland revealed a gravelly loam with a B-horizon matrix color of 10YR 2/2 with common, fine, faint redoximorphic concentrations. The pits were saturated at -18" during our dry season review of this area.

Wetland B was rated using the *WADOE Washington State Wetland Rating System for Eastern Washington 2014 update* (Publ No. 14-06-030). This wetland was rated as a depressional wetland and scored a total of 19 points with 7 points for habitat indicating a Category II wetland. According to Kittitas County Municipal Code Chapter 17A.07, Category II wetlands for a moderate land use as it is assumed the water line

replacement would be considered, have a 150' buffer measured from the wetland edge.

Table 17A.07.030: Standard Buffer Widths

Category of Wetland	Land Use with Low Impact <sup>1</sup>	Land Use with Moderate Impact <sup>2</sup>	Land Use with High Impact <sup>3</sup>	
il.	125 ft	190 ft	250 ft	
H	100 ft	150 ft	200 ft	
- Alley Andreas Andrea	75 ft	110 ft	150 ft	
IV	25 ft	40 ft	50 ft	

#### **Fowler Creek**

Fowler Creek is located along the eastern edge of the site on the west side of Fowler Creek Road. The western OHWM of the creek facing the site was flagged with blue flagging labeled N1-N8.

The stream is approximately 48"-60" wide and meanders along the edge of Fowler Creek Road with a gravel and cobble bottom.

Fowler Creek is mapped as a Type F water on the Fpars map and this seems appropriate for this fish bearing stream.

According to KCMC 17A.04.030.4, Type F streams have a 150' buffer measured from the ordinary high water mark in the Cascade Ecoregion area of the county.

	Riparian Management Zone Widths <sup>1,2</sup>			
Stream Type	Cascade Ecoregion (feet)	Columbia Plateau Ecoregion (feet)		
Type S (Shoreline)	See the SMP	See the SMP		
Type F	150	100		
Type Np	100	65		
Type Ns	50	40		

#### Wetland C

Wetland C is a small emergent and scrub-shrub wetland located along the west side of Fowler Creek Road and east of Wetland A. Stream A, which discharges water from Wetland A, passes through this wetland. The wetland was flagged with flags C1-C7. This wetland is located near some old excavations that were dry and appear to be old borrow pits or dry ponds.

The emergent portion of the wetland contains primarily reed canary grass. The perimeter scrub-shrub portion of te wetland is a mix of alder saplings, and red osier dogwood.

Soil pits excavated within this wetland revealed a gravelly loam with a soil color of 10YR 3/2 with few, fine, faint redoximorphic concentrations. Soils were saturated within 12" of the surface at the time of our site visit.

Using the US Fish and Wildlife Wetland Classification Method (Cowardin et al. 1979), Wetland C would be classified as PEM1C (palustrine, emergent, persistent, seasonally flooded) and PSS1C (palustrine, scrubshrub, broad leaved deciduous, seasonally flooded).

Wetland C was rated using the *WADOE Washington State Wetland Rating System for Eastern Washington 2014 update* (Publ No. 14-06-030). This wetland was rated as a depressional wetland and scored a total of 19 points with 8 points for habitat indicating a Category III wetland.

According to Kittitas County Municipal Code Chapter 17A.07, Category III wetlands for a moderate land use as it is assumed the water line replacement would be considered, have a 110' buffer measured from the wetland edge

Table 17A.07.03	0: Standard	<b>Buffer Widths</b>
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Category of Wetland	Land Use with Low Impact <sup>1</sup>	Land Use with Moderate Impact <sup>2</sup>	Land Use with High Impact <sup>3</sup>
	125 ft	190 ft	250 ft
	100 ft	150 ft	200 ft
111	75 ft	110 ft	150 ft
IV	25 ft	40 ft	50 ft

#### **Proposed Project**

The proposed project is the construction of a 30 stall RV park on the southwest portion of the site., a bed and breakfast and a barn that will be used as a small-scale event center, both being located towards the center of the property. There will be continued use an existing residence that will be converted into a short term rental.

All of the proposed development has been located outside all wetlands and streams. However, in order to make the existing driveway meet County road width requirements, some impacts to the buffers of Wetlands A & B will occur from the road widening. The proposed 60' access right-of-way will pass through 44,299sf of the buffer of Wetland A & B as they overlap in this area. To compensate for this impact, we will add an equal area (44,299sf) to the buffer.

If you have any questions in regards to this report or need additional information, please feel free to contact me at (253) 859-0515 or at <a href="mailto:esewall@sewallwc.com">esewall@sewallwc.com</a>.

Sincerely,

Sewall Wetland Consulting, Inc.

Ed Sewall

Senior Wetlands Ecologist PWS #212

Attached: Site Plan/Survey

Data sheets

Rating Forms and associated exhibits

#### REFERENCES

Cowardin, L., V. Carter, F. Golet, and E. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service, FWS/OBS-79-31, Washington, D. C.

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1. U. S. Army Corps of Engineers Waterways Experiment Station, Vicksburg, Mississippi.

Kittitas County Municipal Code

Muller-Dombois, D. and H. Ellenberg. 1974. Aims and Methods of Vegetation Ecology. John Wiley & Sons, Inc. New York, New York.

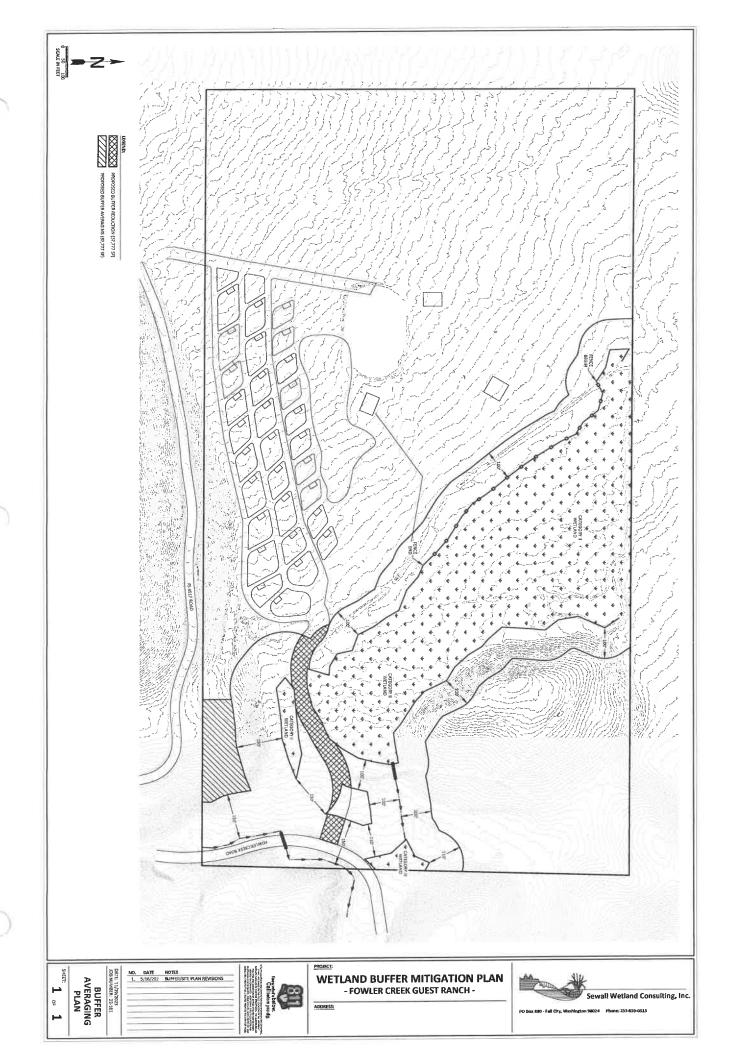
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National Technical Committee for Hydric Soils. 1991. Hydric Soils of the United States. USDA Misc. Publ. No. 1491.

Reed, P., Jr. 1988. National List of Plant Species that Occur in Wetlands: Northwest (Region 9). 1988. U. S. Fish and Wildlife Service, Inland Freshwater Ecology Section, St. Petersburg, Florida.

Reed, P.B. Jr. 1993. 1993 Supplement to the list of plant species that occur in wetlands: Northwest (Region 9). USFWS supplement to Biol. Rpt. 88(26.9) May 1988.

USDA NRCS & National Technical Committee for Hydric Soils, September 1995. Field Indicators of Hydric Soils in the United States - Version 2.1



## WETLAND DETERMINATION DATA FORM - Arid West Region

NE end of Wetland A

Project/Site: Fowler	Creek		City/County: K/	ttites	_ Sampling Date: 10.10-3
Applicant/Owner:					Sampling Point: DP#
Investigator(s):	Sewall				
Landform (hillslope, terrace, etc.):			Local relief (concave,	convex, none):	Slope (%):
Subregion (LRR):					
Soil Map Unit Name: Are climatic / hydrologic conditions on	AL	this since of rese	No. No.	/If no explain in	Damarke )
				(ii no, explain iii	present? Yes No
Are Vegetation, Soil, o					
Are Vegetation, Soil, o				eeded, explain any answ	
SUMMARY OF FINDINGS - A	Attach site ma	p showing	sampling point I	ocations, transect	s, important features, etc
Hydrophytic Vegetation Present?	Yes_	'No			· · · · · · · · · · · · · · · · · · ·
Hydric Soil Present?		TNo	Is the Sample		
Wetland Hydrology Present?		No	within a Wetlan	nd? Yes	No
Remarks:					
	1				
(FORTATION) Has a signalic		-4-			
/EGETATION - Use scientifi	c names of pia	Absolute	Dominant Indicator	Dominance Test wo	rkeheet
Tree Stratum (Plot size:	)		Species? Status	Number of Dominant	
1				That Are OBL, FACW	
2.				Total Number of Dom	inant
3				Species Across All St	
4	1			Percent of Dominant	Species .
			= Total Cover	That Are OBL, FACW	
Sapling/Shrub Stratum (Plot size: _				Davidski programa	
1				Prevalence Index wo	
2					Multiply by: x 1 =
3	· · · · · · · · · · · · · · · · · · ·				x2=
4					x3=
5			- Tatal Cavas		x4=
Herb Stratum (Plot size:			= Total Cover		x5=
1. Phalmis arus	two	80	-Acu		(A) (B)
2. Festica sp	e	20	FAL	Coldini (Gaste)	(-7
3.				Prevalence Inde	ex = B/A =
4				Hydronbytic Vegetal	
5				Dominance Test	
6				Prevalence Index	
7.				Morphological Ac	laptations <sup>1</sup> (Provide supporting ks or on a separate sheet)
8					ophytic Vegetation <sup>1</sup> (Explain)
			= Total Cover		opily to vogototo. (Explain)
Woody Vine Stratum (Plot size:				<sup>1</sup> Indicators of hydric s	oil and wetland hydrology must
1					sturbed or problematic.
2			= Total Cover	Hydrophytic	
	27 100 20			Vegetation	
% Bare Ground in Herb Stratum	% Co	ver of Biotic Cri	ust	Present? Y	'es No
Remarks:					

Sampling Point: DP#1

Profile Description: (Describe to the depth nee	ded to document the indicator or confirm	the absence of indicators.)
Depth Matrix	Redox Features	
	or (moist) % Type <sup>1</sup> Loc <sup>2</sup>	Texture Remarks
6 10 m 2/2		
14 7.541 2.5/2	Few For Fast	954
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduc	ed Matrix, CS=Covered or Coated Sand Gr	ains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs,	unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	1 cm Muck (A9) (LRR C)
Histic Epipedon (A2)	Stripped Matrix (S6)	2 cm Muck (A10) (LRR B)
Black Histic (A3)	Loamy Mucky Mineral (F1)	Reduced Vertic (F18)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Red Parent Material (TF2)
Stratified Layers (A5) (LRR C)	Depteted Matrix (F3)	Other (Explain in Remarks)
1 cm Muck (A9) (LRR D)	Redox Dark Surface (F6)	
Depleted Below Dark Surface (A11)	Depleted Dark Surface (F7)	_
Thick Dark Surface (A12)	Redox Depressions (F8)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Vernal Pools (F9)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)		unless disturbed or problematic.
Restrictive Layer (if present):		
Type:		
Depth (inches):		Hydric Soil Present? Yes No
Remarks:		lead of the second of the seco
HYDROLOGY		
Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; chec	k all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1)	Salt Crust (B11)	Water Marks (B1) (Riverine)
1 1	Biotic Crust (B12)	Sediment Deposits (B2) (Riverine)
High Water Table (A2) Saturation (A3)	Aquatic Invertebrates (B13)	Drift Deposits (B3) (Riverine)
1	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Water Marks (B1) (Nonriverine)	Oxidized Rhizospheres along Living Roo	
Sediment Deposits (B2) (Nonriverine)	Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3) (Nonriverine)	Recent Iron Reduction in Tilled Soils (C6	
Surface Soil Cracks (B6)		Saturation visible on Aerial imagery (C9) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Thin Muck Surface (C7)	
Water-Stained Leaves (B9)	Other (Explain in Remarks)	FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes No	Depth (inches):	
Water Table Present? Yes No	Depth (inches):	
Saturation Present? Yes No	Depth (inches): / Z Wetta	and Hydrology Present? Yes No
(includes capillary fringe)		Maria de la companya
Describe Recorded Data (stream gauge, monitorin	weil, aerial photos, previous inspections), i	ii avaliabie:
Remarks:		

## WETLAND DETERMINATION DATA FORM - Arid West Region

low NE

Project/Site: Fowler Cree	K. City/County: Kittites	Sampling Date: 10.10.27
	State: IN	A Sampling Print DO# Z
investigator(s): Id Sewall	Section, Township, Range:	
	Local relief (concave, convex, none):	
Subregion (LRR):	Lat: Long:	Datum:
Soil Map Unit Name:	NWI cla	ssification:
	for this time of year? YesNo (If no, explain	in Remarks.)
Are Vegetation, Soil, or Hydrology		es" present? Yes No
Are Vegetation, Soil, or Hydrology _		
SUMMARY OF FINDINGS - Attach site	map showing sampling point locations, transc	ects, important features, etc.
Hydrophytic Vegetation Present? Yes	No V Is the Sampled Area	
Hydric Soil Present? Yes	No N	No
Wetland Hydrology Present? Yes	No within a Wetland? Yes	R0
VEGETATION – Use scientific names of	plants.	
	Absolute Dominant Indicator Dominance Test	worksheet:
Tree Stratum (Plot size:)	% Cover Species? Status Number of Domina	int Species /
1. Piris pordres -	50 VPL That Are OBL, FAC	CW, or FAC:(A)
2.	Total Number of D	
3.	Species Across All	Strata: (B)
4	Percent of Domina That Are OBL, FAI	
Sapling/Shruto Stratum (Plot size:  1. Bubu's Nerves	)	
2. Symphoricapus albi		
, ,	ORL enocine	x1=
3		x 2 =
5.		x 3 =
·	= Total Cover FACU species	x4=
Herb Stratum (Plot size:)	UPL species _	x5=
1. My-pyra spp.	30 Fac Column Totals:	(A) (B)
2	Prevalence	ndex = B/A =
3	The state of the s	etation indicators:
4	Dominance To	
6.	Drevolence in	
7.	Morphological	Adaptations <sup>1</sup> (Provide supporting
8.		marks or on a separate sheet)
	= Total Cover Problematic H	ydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:)	¹Indicators of hwtr	ic soil and wetland hydrology must
1	be present, unless	disturbed or problematic.
2	= Total Cover Hydrophytic	
% Bare Ground in Herb Stratum	Cover of Biotic Crust Present?	YesNo
Remarks:	1	

-	-	# 11	
-	e r	11	
-	•	п	_

Sampling Point: DP#Z

		depth nee			r confirm	the absence of indicators.	
Depth (inches)	Matrix Color (moist) %	Col	Redox Fea	itures 7 Type	Loc2	Texture	Remarks
14	10h 3/25		- Intology	<u> </u>		ach	
	1-10-1					1	
-		_		<del></del>			
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		- 1.4E-L	<del></del>				
		_					
<sup>1</sup> Type: C=Cc	ncentration, D=Depletion, F	RM=Reduc	ed Matrix, CS=Co	vered or Coated	i Sand Gr	ains. <sup>2</sup> Location: PL=Por	
Hydric Soil I	ndicators: (Applicable to	all LRRs,	unless otherwise	noted.)		indicators for Problemat	-
Histosol	(A1)		Sandy Redox (S	-		1 cm Muck (A9) (LRR	•
	ipedon (A2)	-	Stripped Matrix (	*		2 cm Muck (A10) (LR	
Black His		-	Loamy Mucky Mi			Reduced Vertic (F18)	
	n Sulfide (A4)	-	Loamy Gleyed M			Red Parent Material ( Other (Explain in Ren	•
_	Layers (A5) (LRR C)	-	Depleted Matrix ( Redox Dark Surfa			Outer (Express in Ken	ia na j
	ck (A9) (LRR D) Below Dark Surface (A11)		Depleted Dark Sun				
	rk Surface (A12)	-	Redox Depression			<sup>3</sup> Indicators of hydrophytic	vegetation and
_	ucky Mineral (S1)		Vernal Pools (F9			wetland hydrology must	-
	leyed Matrix (S4)	3	,			unless disturbed or prol	olematic.
Restrictive L	ayer (if present):						
Type:							
Depth (inc	hes):					Hydric Soil Present? You	35 No
Remarks:							
HYDROLO	2V						
	rology Indicators:					1000	
	0,	and allower	all alt ample (			Concedent Indicators	(2 or more required)
77	ators (minimum of one requ	irea; cneci					
	Water (A1)	-	Salt Crust (B11)			Water Marks (B1	
	er Table (A2)	-	Biotic Crust (B1	•			its (B2) (Riverine)
Saturatio		=	Aquatic Inverteb			Drift Deposits (B	
	arks (B1) (Nonriverine)	-	Hydrogen Sulfid		hdn= D=-	Drainage Patterr	
	t Deposits (B2) (Nonriverin	ie)	Oxidized Rhizos		_	— .	, ,
'	osits (B3) (Nonriverine)	-	Presence of Re			Crayfish Burrows	e on Aerial Imagery (C9)
	Soil Cracks (B6)	(DZ)	Recent Iron Rec		Sons (Co	Shallow Aquitand	
	n Visible on Aerial Imagery	(10)	Thin Muck Surfa Other (Explain i			FAC-Neutral Tes	• •
	ained Leaves (B9)		Other Explain	i Remarks;		FAC-Neutral Fes	i. (D3)
Field Observ		Ma	Donth Graham				
Surface Water			Depth (inches)		=		
Water Table			Depth (inches)			and Made I are Born 5 at 6 . N	
Saturation Pro (includes cap		_ No	Depth (inches)		Wetla	and Hydrology Present? Y	es No
	orded Data (stream gauge,	monitoring	well, aerial photo	s, previous insp	ections), i	f available:	
				,			
Remarks:							

## WETLAND DETERMINATION DATA FORM - Arid West Region

wet A new A8

roject/Site: Fowler	Cree	K.	City/County:	Kittitus	Sampling Date: _/	10-10-
ndont/Oumer				State: _	WA Sampling Point: _	DPH
vestigator(s):	Sewall		Section, Towns	ship, Range:		
ndform (hillslope, terrace, etc.):			Local relief (co	ncave, convex, none):	: Slope	(%):
bregion (LRR):				Long:	Datum:	
il Map Unit Name:				, N	WI classification:	
e climatic / hydrologic conditions of		for this time of ve	ar? Yes	No (If no. e	explain in Remarks.)	
e Vegetation, Soil	900				nstances" present? Yes	/ No.
e Vegetation, Soil,					any answers in Remarks.)	
UMMARY OF FINDINGS -				•	•	tures. et
		./	Jp	1)		
lydrophytic Vegetation Present?	Yes	No	is the S	ampled Area		
Hydric Soil Present?  Wetland Hydrology Present?	Yes Yes	No	within a	Wetland?	Yes No	
Remarks:	165					
tolinare.						
EGETATION – Use scientif	fic names of		B	inter Deminera	Tool workshoot	
ree Stratum (Plot size:	)		Dominant Inc. Species? S	tetus	Test worksheet: Cominant Species	
ree Stratum (Plot size:	a	40			SL, FACW, or FAC:	(A)
				Total Number	as of Dominant	
					er of Dominant oss All Strata:	(B)
,				1		
Double - Miles to Observe - (Cilet alman			= Total Cover		lominant Species // / // // // // // // // // // // //	
Sapling/Shrub Stratum (Plot size:		30	F	A 4 Prevalence	Index worksheet:	
				Total %	Cover of: Multiply b	γ:
				OBL species	x1=	
				FACW speci	ies x 2 =	
					x3=	
			= Total Cover	FACU specie	es x4=	
lerb Stratum (Plot size:		34	ſ	UPL species	x 5 =	
. Lysich fur as		$\frac{20}{30}$		Column Tota	als: (A)	(B)
Glanta e				<del>gu</del>	ence Index = B/A =	
	I			Marin market	c Vegetation Indicators:	
					nce Test is >50%	
-				Demicalor	nce Index is ≤3.01	
					logical Adaptations <sup>1</sup> (Provide su	monting
				data	in Remarks or on a separate sh	neet)
			= Total Cover	Problem	natic Hydrophytic Vegetation <sup>1</sup> (E	xplain)
Voody Vine Stratum (Plot size:	)		- I GUAR GUVET			
· Carrier and the same of the same				¹Indicators o	f hydric soil and wetland hydrol	ogy must
				De present, u	unless disturbed or problematic.	
				1	/	
			= Total Cover		c /	
				Vegetation		
2		Cover of Biotic C		Vegetation	Yes No	-
				Vegetation		····

Sampling Point: DP#

Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type <sup>1</sup>	
16 10/2/1		heric pent
		2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1
Type: C=Concentration, D=Depletion, F	RM=Reduced Matrix, CS=Covered or Coate	ed Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Solis <sup>3</sup> :
lydric Soil Indicators: (Applicable to	II.	
Histosol (A1)	Sandy Redox (S5)	1 cm Muck (A9) (LRR C)
Histic Epipedon (A2)	Stripped Matrix (S6)	2 cm Muck (A10) (LRR B) Reduced Vertic (F18)
Black Histic (A3) Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1)  Loamy Gleved Matrix (F2)	Red Parent Material (TF2)
Stratified Layers (A5) (LRR C)	Depleted Matrix (F3)	Other (Explain in Remarks)
1 cm Muck (A9) (LRR D)	Redox Dark Surface (F6)	
Depleted Below Dark Surface (A11)	Depleted Dark Surface (F7)	
Thick Dark Surface (A12)	Redox Depressions (F8)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Vernal Pools (F9)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)		unless disturbed or problematic.
Restrictive Layer (if present):		
Type:		
Depth (inches):		Hydric Soil Present? Yes No
Remarks:		
YDROLOGY		
Wetland Hydrology Indicators:		
Primary Indicators (minimum of one requ	ired; check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1)	Salt Crust (B11)	Water Marks (B1) (Riverine)
High Water Table (A2)	Biotic Crust (B12)	Sediment Deposits (B2) (Riverine)
Saturation (A3)	Aquatic Invertebrates (B13)	Drift Deposits (B3) (Riverine)
Water Marks (B1) (Nonriverine)	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Sediment Deposits (B2) (Nonrivering)		Living Roots (C3) Dry-Season Water Table (C2)
Drift Deposits (B3) (Nonriverine)	Presence of Reduced Iron (C4	
Surface Soil Cracks (B6)	Recent Iron Reduction in Tille	d Soils (C6) Saturation Visible on Aerial Imagery (C9)
Inundation Visible on Aerial Imagery		Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Other (Explain in Remarks)	FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes	No Depth (inches):	_
Water Table Present? Yes	_ No Depth (inches):	_
Saturation Present? Yes	No Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe)		
Describe Recorded Data (stream gauge,	monitoring well, aerial photos, previous ins	pections), if available:
Remarks:		

Wet A New A30

## WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site:	Fouler	Cree	K.		City/County		ttites	Sampling Date:	10.10.5
Applicant/Owner:							State: WA	Sampling Point: _	DPAL
Investigator(s):	21	Sewa/		\$	Section, To		nge:		
			737541		Local relief	(concave, c	convex, none):	Stop	oe (%):
Subregion (LRR):							Long:		
Soil Map Unit Name:						- 2	NWI classific	cation:	
				ne of yea	r? Yes	No_	(If no, explain in F	Remarks.)	
Are Vegetation		24,44					Normal Circumstances"	present? Yes	No
Are Vegetation							eded, explain any answe		
						g point lo	ocations, transects	s, important fe	atures, etc.
			/						
Hydrophytic Veget		Yes V			is th	e Sampled	Area		
Hydric Soil Present Wetland Hydrology		Yes			with	in a Wetlan	d? Yes <u></u>	No	
Remarks:	7 F (GSGIII)	100							
T CATELLIO.									
<b>VEGETATION</b> -	- Use scienti	fic names of	plants.						
					Dominant		Dominance Test worl	ksheet:	
Tree Stratum (Plo				-	Species?	•	Number of Dominant S That Are OBL, FACW,		(A)
1									(')
2 3.							Total Number of Domin Species Across All Stra		(B)
4									(-/
1.					= Total Co	ver	Percent of Dominant S That Are OBL, FACW,		(A/B)
Sapling/Shrub Stra			)	20		FAL			
1. Alnu			_			46	Prevalence Index wo	rkeneet: Multiply	t bar
2							OBL species	_	
3							FACW species		
4							FAC species		
5					= Total Co	ver	FACU species		
Herb Stratum (Plo				<del></del>		Tar.	UPL species		- 1
1. Scirpus			=	-0		F4 ( 100	Column Totals:	(A)	(B)
2. Stacky		yea		20		FACE	Danielanes Index		
3. Phalin	y arm	1		20			Hydrophytic Vegetati	( = B/A =	
4	Jun 12	12 run		-0		FAL	Dominance Test is		
5							Prevalence Index		
6.							Morphological Ada	entations (Provide	supporting
7							data in Remark	s or on a separate	sheet)
0					= Total Co	ver	Problematic Hydro	phytic Vegetation <sup>1</sup>	(Explain)
Woody Vine Stratu	m (Plot size:	)			, , , , , , , , , , , , , , , , , , , ,				
1							<sup>1</sup> Indicators of hydric so be present, unless dist		
2								_/	
			_		= Total Co	iver	Hydrophytic Vegetation		1
% Bare Ground in	Herb Stratum _	9	Cover of	Biotic C	rust			s No	<u> </u>
Remarks:									
ļ									
									1
T. Control of the Con			ar .						

Sampling Point:

٠.	D	p#	4
h	1	Γ"	7

[ m		h needed to document the indicator or co	•
Depth (inches)	Matrix Color (moist) %	Redox Features  Color (moist) % Type Lo	oc <sup>2</sup> Texture Remarks
4	10/23/3		
14	1043/2	com not di	1
14	1011/10	Com mo de	
N <del></del>			
<sup>1</sup> Type: C=Co	oncentration, D=Depletion, RM=	Reduced Matrix, CS=Covered or Coated Sa	
Hydric Soil	Indicators: (Applicable to all L	.RRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)	Sandy Redox (S5)	1 cm Muck (A9) (LRR C)
	pipedon (A2)	Stripped Matrix (S6)	2 cm Muck (A10) (LRR B)
Black Hi	* *	Loamy Mucky Mineral (F1)	Reduced Vertic (F18)
	n Sulfide (A4)	Loamy Gleyed Matrix (F2)	Red Parent Material (TF2)
	Layers (A5) (LRR C)	Depleted Matrix (F3)  Redox Dark Surface (F6)	Other (Explain in Remarks)
_	ick (A9) (LRR D)	Depleted Dark Surface (F7)	
	d Below Dark Surface (A11) ark Surface (A12)	Redox Depressions (F8)	<sup>3</sup> Indicators of hydrophytic vegetation and
	lucky Mineral (S1)	Vernal Pools (F9)	wetland hydrology must be present,
	Gleyed Matrix (S4)		unless disturbed or problematic.
Restrictive I	Layer (if present):		
Type:			
Depth (inc	ches):		Hydric Soll Present? Yes No
Remarks:			
HYDROLO	GY		
	drology Indicators:		
	ators (minimum of one required;	check all that anniv)	Secondary Indicators (2 or more required)
	Water (A1)		
	water (AT)		Mater Marke (R1) (Piverine)
	ton Toble (A2)	Salt Crust (B11)	Water Marks (B1) (Riverine)
	iter Table (A2)	Biotic Crust (B12)	Sediment Deposits (B2) (Riverine)
Saturation	on (A3)	Biotic Crust (B12) Aquatic Invertebrates (B13)	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine)
Saturation Water M	on (A3) arks (B1) (Nonriverine)	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)
Saturation Water M Sediment	on (A3) larks (B1) (Nonriverine) nt Deposits (B2) (Nonriverine)	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin	Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  g Roots (C3) Dry-Season Water Table (C2)
Saturation Water M Sediment Drift Dep	on (A3) larks (B1) (Nonriverine) at Deposits (B2) (Nonriverine) posits (B3) (Nonriverine)	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4)	Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)
Saturation Water M Sediment Drift Dep	on (A3) larks (B1) (Nonriverine) lat Deposits (B2) (Nonriverine) losits (B3) (Nonriverine) Soil Cracks (B6)	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi	Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)
Saturation Water M Sediment Drift Dep Surface	on (A3) larks (B1) ( <b>Nonriverine)</b> nt Deposits (B2) ( <b>Nonriverine</b> ) posits (B3) ( <b>Nonriverine</b> ) Soil Cracks (B6) on Visible on Aerial Imagery (B7)	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7)	Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  pry-Season Water Table (C2)  Crayfish Burrows (C8)
Saturation Water M Sediment Drift Dep Surface Inundation	on (A3) larks (B1) (Nonriverine) at Deposits (B2) (Nonriverine) cosits (B3) (Nonriverine) Soil Cracks (B6) on Visible on Aerial Imagery (B7) tained Leaves (B9)	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation VIsible on Aerial Imagery (C9) Shallow Aquitard (D3)
Saturation Water M Sediment Drift Dep Surface Inundation Water-St Field Observ	on (A3) larks (B1) (Nonriverine) at Deposits (B2) (Nonriverine) cosits (B3) (Nonriverine) Soil Cracks (B6) on Visible on Aerial Imagery (B7) tained Leaves (B9) vations:	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Thin Muck Surface (C7) Other (Explain in Remarks)	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation VIsible on Aerial Imagery (C9) Shallow Aquitard (D3)
Saturation Water M Sediment Drift Dep Surface Inundation Water-St Field Observ Surface Water	on (A3) larks (B1) (Nonriverine) at Deposits (B2) (Nonriverine) posits (B3) (Nonriverine) Soil Cracks (B6) on Visible on Aerial Imagery (B7) tained Leaves (B9) vations: er Present?  YesN	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Thin Muck Surface (C7) Other (Explain in Remarks)	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation VIsible on Aerial Imagery (C9) Shallow Aquitard (D3)
Saturation Water M Sediment Drift Dep Surface Inundation Water-St Field Obsert Surface Water Water Table	on (A3) larks (B1) (Nonriverine) lat Deposits (B2) (Nonriverine) losits (B3) (Nonriverine) Soil Cracks (B6) lon Visible on Aerial Imagery (B7) latined Leaves (B9) latines: let Present?  Yes  N  Yes  N	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches):	Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Saturation Water M Sediment Drift Dep Surface Inundation Water-St Field Observ Surface Water	on (A3) larks (B1) (Nonriverine) at Deposits (B2) (Nonriverine) posits (B3) (Nonriverine) Soil Cracks (B6) on Visible on Aerial Imagery (B7) tained Leaves (B9)  vations: er Present? Present? Yes N Yes N	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches):	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation VIsible on Aerial Imagery (C9) Shallow Aquitard (D3)
Saturation Water M Sedimen Drift Dep Surface Inundation Water-St Field Observ Surface Water Water Table Saturation Pr (includes cap	on (A3) larks (B1) (Nonriverine) at Deposits (B2) (Nonriverine) posits (B3) (Nonriverine) Soil Cracks (B6) on Visible on Aerial Imagery (B7) tained Leaves (B9)  vations: ar Present? Present? Yes N present? Yes N present? N	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches):	Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? YesNo
Saturation Water M Sedimen Drift Dep Surface Inundation Water-St Field Observ Surface Water Water Table Saturation Pr (includes cap	on (A3) larks (B1) (Nonriverine) at Deposits (B2) (Nonriverine) posits (B3) (Nonriverine) Soil Cracks (B6) on Visible on Aerial Imagery (B7) tained Leaves (B9)  vations: ar Present? Present? Yes N present? Yes N present? N	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches):	Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? YesNo
Saturation Water M Sedimen Drift Dep Surface Inundation Water-St Field Observ Surface Water Water Table Saturation Pr (includes cap	on (A3) larks (B1) (Nonriverine) at Deposits (B2) (Nonriverine) posits (B3) (Nonriverine) Soil Cracks (B6) on Visible on Aerial Imagery (B7) tained Leaves (B9)  vations: ar Present? Present? Yes N present? Yes N present? N	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches):	Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? YesNo
Saturation  Water M  Sediment  Drift Dep  Surface  Inundation  Water-Si  Field Obser  Surface Water  Water Table  Saturation Pr  (includes cap  Describe Rec	on (A3) larks (B1) (Nonriverine) at Deposits (B2) (Nonriverine) posits (B3) (Nonriverine) Soil Cracks (B6) on Visible on Aerial Imagery (B7) tained Leaves (B9)  vations: ar Present? Present? Yes N present? Yes N present? N	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches):	Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? YesNo
Saturation  Water M  Sediment  Drift Dep  Surface  Inundation  Water-Si  Field Obser  Surface Water  Water Table  Saturation Pr  (includes cap  Describe Rec	on (A3) larks (B1) (Nonriverine) at Deposits (B2) (Nonriverine) posits (B3) (Nonriverine) Soil Cracks (B6) on Visible on Aerial Imagery (B7) tained Leaves (B9)  vations: ar Present? Present? Yes N present? Yes N present? N	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches):	Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? YesNo
Saturation  Water M  Sediment  Drift Dep  Surface  Inundation  Water-Si  Field Obsert  Surface Water  Water Table is  Saturation Pr  (includes cap  Describe Rec	on (A3) larks (B1) (Nonriverine) at Deposits (B2) (Nonriverine) posits (B3) (Nonriverine) Soil Cracks (B6) on Visible on Aerial Imagery (B7) tained Leaves (B9)  vations: ar Present? Present? Yes N present? Yes N present? N	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches):	Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? YesNo
Saturation  Water M  Sediment  Drift Dep  Surface  Inundation  Water-Si  Field Obsert  Surface Water  Water Table in Saturation Profincludes cap  Describe Recommendation  Describe Recommendation  Water Table in Saturation Profincludes cap  Describe Recommendation	on (A3) larks (B1) (Nonriverine) at Deposits (B2) (Nonriverine) posits (B3) (Nonriverine) Soil Cracks (B6) on Visible on Aerial Imagery (B7) tained Leaves (B9)  vations: ar Present? Present? Yes N present? Yes N present? N	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches):	Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? YesNo

### WETLAND DETERMINATION DATA FORM - Arid West Region

wet A New A 43

roject/Site:Fo	when	Cree	K		City/Cour	nty: Ki	++1+45	8	Sampling Date:	10-13
anticant/Owner							State:	WA s	Sampling Point:	DP#
vestigator(s):	Zd 5	Sewall			Section,	Township, Ra	nge:			
andform (hillslope, terrace,	etc.):				Local rel	ief (concave,	convex, none): _		Sto	pe (%):
ibregion (LRR):				Lat:			Long:		Datu	m:
oil Map Unit Name:							NW	I classificati	ion:	
e climatic / hydrologic con	ditions on ti	ne site typical	for this	time of yea	er? Yes_	No	(If no, ex	plain in Ren	narks.)	,
e Vegetation, Soil							Normal Circums			∠ No
e Vegetation, Soil	, or	Hydrology	na	iturally pro	blematic	? (if ne	eded, explain a	ny answers	in Remarks.)	
UMMARY OF FINDI	NGS - A	ttach site	map s	howing	sampli	ing point l	ocations, tra	ınsects, i	important fe	atures, et
Hydrophytic Vegetation Pn Hydric Soil Present?	sent?	Yes				the Sampled		/es	No	
Wetland Hydrology Presen	t?	Yes	No							
EGETATION — Use s	cientific	names of	plant	В.						
ree Stratum (Plot size: _		_)				nt Indicator 7 Status	Dominance T Number of Do			75
							That Are OBL,			(A)
·							Total Number	of Dominan	nt 🚤	
							Species Acros	ss All Strata	_3	(B)
Sapling/Shrub Stratum (P					= Total (	Cover	Percent of Doi That Are OBL			シ (A/B
							Prevalence In	idex works	heet:	
*							Total % C	over of:	Multiple	y by:
							OBL species		x1=	
•							1		x2=	
			_			<del></del>			×3=	
lerb Stratum (Plot size:		3			= Total (	Cover			x4= _ x5=	
. Scirpus	Miere	capu		20		FAIN	,		(A)	
JUNE			<u></u>	30		FAON	]			
Phleu	mp.	reto		32		FAC			B/A =	
							Hydrophytic	_		
-							Dominand			
									ations <sup>1</sup> (Provide	supporting
							data in	Remarks o	r on a separate	sheet)
					= Total (		Problemat	tic Hydroph	ytic Vegetation <sup>1</sup>	(Explain)
Voody Vine Stratum (Plot									nd wetland hydr	
2							be present, un	iless disturb	ed or problemat	gC.
					= Total C	Cover	Hydrophytic Vegetation		-	
		200	Na	- CDI - N - O	m end		Present?	V	M-	
% Bare Ground in Herb Str	atum		Cover	of Blotic Ci	rist		Lieseift	res_	No	

Sampling Point: DPB5

Profile Des	cription: (Describe t	o the depth nee	ded to docume	ent the in	dicator or c	confirm th	e absence	of indicators.)	
Depth	Matrix		Redox	Features					
(inches)	Color (moist)	<u>%</u> Co	for (moist)	%	Type L	_oc²	Texture		Remarks
6	54 3/		com	my	Furt				
11	10p 2/1					5,	mer m	L-524	
14	7 7 7 7 1		,			-	-	-	
	23								
1Time: C-C	oncentration, D=Deple	ation PM=Redu	od Matrix CS=	Covered	or Coated Sa	and Grains	s ²Lo	cation: PL=Pore	Lining, M=Matrix.
Hydric Soil	Indicators: (Applica	hle to all I RRs.	unless other	lse note	d.)	dia Ordin			c Hydric Solls <sup>3</sup> :
1		Die to all Elitico,	Sandy Redox		,			Muck (A9) (LRR	
Histoso		:	Stripped Mate			,		Muck (A10) (LIRR	
	pipedon (A2)	=	Loamy Muck		(F1)			ed Vertic (F18)	. 5,
	istic (A3) en Sulfide (A4)	_	Loamy Gleye		• •			arent Material (T	F2)
	en Suilide (A4) d Layers (A5) ( <b>LRR C</b>	,	Depleted Mat		. ~/			(Explain in Rema	-
	uck (A9) (LRR D)	,	Redox Dark S		6)				•
	d Below Dark Surface	(A11)	Depleted Dar		-				
	ark Surface (A12)	,,	Redox Depre				3Indicators	of hydrophytic v	egetation and
	Mucky Mineral (S1)	-	Vernal Pools		•			hydrology must	
	Gleyed Matrix (S4)			` '			unless o	listurbed or probl	ematic.
	Layer (if present):								
Type:									./
	ches):					١,	lvdric Soil	Present? Ye	s No
	icites).						.,		
Remarks:									
HYDROLO	CV		ű.						
	drology Indicators:								
Primary Indi	cators (minimum of or	e required; chec	k all that apply)	4			Seco	ndary Indicators	(2 or more required)
Surface	Water (A1)		Salt Crust (E	311)			V	Vater Marks (B1)	(Riverine)
High Wa	ater Table (A2)	_	Biotic Crust	(B12)			5	Sediment Deposit	s (B2) (Riverine)
Saturati	on (A3)		Aquatic Inve	rtebrates	(B13)		0	Prift Deposits (B3	) (Riverine)
	larks (B1) (Nonriveri	ne)	Hydrogen S	ulfide Ode	or (C1)		0	Prainage Patterns	s (B10)
	nt Deposits (B2) (Non				es along Livir	ng Roots (	C3) [	)ry-Season Wate	r Table (C2)
_	posits (B3) (Nonriver		Presence of	•	_	•		Crayfish Burrows	(C8)
	Soil Cracks (B6)		T-		n in Tilled So	oils (C6)		Saturation Visible	on Aerial Imagery (C9)
	ion Visible on Aerial In	nagery (B7)	Thin Muck S			, , ,		Shallow Aquitard	
	Stained Leaves (B9)		Other (Expla	•	· .			AC-Neutral Test	•
Field Obser			Cator (Expla			T			
		a Na St	Double (in als	.aalı					
Surface Wat		s No	Depth (inch						_
Water Table		sNo	Depth (inch		1.				<i>(</i>
Saturation P		s No	Depth (inch	es):	u	Wetland	Hydrolog	y Present? Ye	sNo
(includes ca	pillary fringe) corded Data (stream :	nauge monitorin	well serial ne	intoe nite	vious inened	tions) if a	vailable:		
DESCIDE RE	COLUCU DAM (SUCAIII )	gauge, moment	a won, acrear pr	owa, pre	oco mapcul	racina <sub>js</sub> ii Q	· January,		
			ļ						
Remarks:									

wethout T3

## WETLAND DETERMINATION DATA FORM - Arid West Region

Pario et/Cito:	Fouler	Cree	K	City/County	Ki	++,+=5	Sampling Date:	10-13-
Project/Site: Applicant/Owner:				Onyroddiny		State: WA	Sampling Point:	
Investigator(s):	Zd	Sewall		Section. To	wnship. Rai	nge:		
Landform (hillslope, ter	race etc.).			2		convex, none):		pe (%):
Subregion (LRR):						Long:		
Soil Map Unit Name: _						NWI classi		
			for this time of the			(If no, explain in		
Are climatic / hydrologi			significantly			Normal Circumstances		∕ No
Are Vegetation						eded, explain any ansv		140
Are Vegetation						ocations, transec		atures etc
SUMMART OF FI	NDINGS -	Allacii Sile	,		g pont n	ocations, dansec	co, important to	atures, etc.
Hydrophytic Vegetation	on Present?	Yes	No	NO CH	e Sampled	Area		
Hydric Soil Present?		Yes	No	with	in a Wetlar	nd? Yes	No	_
Wetland Hydrology P Remarks:	resentr	Yes						
regitterno.								
VEGETATION - L	jse scientifi	ic names of	plants.					
T Di-t (Di-t-	·		Absolute	Dominant Species?		Dominance Test wo		
Tree Stratum (Plot s						Number of Dominant That Are OBL, FACV		2 (A)
2.								(//
3.						Total Number of Don Species Across All S	-	(B)
4				-		-		(0)
7.				= Total Co	ver	Percent of Dominant That Are OBL, FACV		(A/B)
Sapling/Shrub Stratu			1 20		FAI			()
1. Popul=	s botter	rm				Prevalence Index w	1.50	
2						Total % Cover of		y by:
3			<del></del>			OBL species		
4						FAC species		
5				= Total Co	VOF	FACU species		
Herb Stratum (Plot s	size:	)		_	EAL	UPL species		
1. Phah	my am	My	100	<i></i>	Hav	Column Totals:		
2								
3							ex = B/A =	
4						Hydrophytic Vegeta  Dominance Test		
5						Prevalence Inde:		
6							x is 53.0 daptations¹ (Provide	sunnortina
7						data in Rema	rks or on a separate	sheet)
8				= Total Co		Problematic Hyd	rophytic Vegetation <sup>1</sup>	(Explain)
Woody Vine Stratum	(Plot size:	)		rotal C0	ver			
1			th.			'Indicators of hydric s		
2						be present, unless di	sturbed or problema	DC.
				_ = Total Co	ver	Hydrophytic		
% Bare Ground in He	arb Stratum	%	Cover of Biotic (	Crust		Vegetation Present?	Yes No	
Remarks:						L		

-	~	90	
S	( )	ш.	

Sampling Point: >P++ C

Profile Description: (Describe to the depth need	ed to document the indicator or confirm	n the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) % Col	or (moist) % Type¹ Loc²	Texture Remarks
14 ronth	cand	956
		,
<del></del>		
6		
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduc	ed Matrix, CS=Covered or Coated Sand G	rains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs,		Indicators for Problematic Hydric Solls <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	1 cm Muck (A9) (LRR C)
Histic Epipedon (A2)	Stripped Matrix (S6)	2 cm Muck (A10) (LRR B)
Black Histic (A3)	Loamy Mucky Mineral (F1)	Reduced Vertic (F18)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Red Parent Material (TF2)
Stratified Layers (A5) (LRR C)	Depleted Matrix (F3)	Other (Explain in Remarks)
1 cm Muck (A9) (LRR D)	Redox Dark Surface (F6) Depleted Dark Surface (F7)	
Depleted Below Dark Surface (A11)	Redox Depressions (F8)	<sup>3</sup> Indicators of hydrophytic vegetation and
Thick Dark Surface (A12) Sandy Mucky Mineral (S1)	Vernal Pools (F9)	wetland hydrology must be present,
Sandy Mucky Milleral (S1)	Vernal Fools (1.5)	unless disturbed or problematic.
Restrictive Layer (if present):		
Type:		
Depth (inches):		Hydric Soil Present? Yes No
Remarks:		
HYDROLOGY		
Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; checi	(all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1)	Salt Crust (B11)	Water Marks (B1) (Riverine)
	Biotic Crust (B12)	Sediment Deposits (B2) (Riverine)
High Water Table (A2) Saturation (A3)	Aquatic Invertebrates (B13)	Drift Deposits (B3) (Riverine)
	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Water Marks (B1) (Nonriverine)	Oxidized Rhizospheres along Living Roo	
Sediment Deposits (B2) (Nonriverine)	Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3) (Nonriverine)		
Surface Soil Cracks (B6)	Recent Iron Reduction in Tilled Soils (CI	Saltration visible on Acrial Imagery (cs) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Thin Muck Surface (C7)	
Water-Stained Leaves (B9)	Other (Explain in Remarks)	FAC-Neutral Test (D5)
Field Observations:	<b>-</b>	
Surface Water Present? Yes No	Depth (inches):	
Water Table Present? Yes No	Depth (inches):	
Saturation Present? Yes No	Depth (inches): Wetl	land Hydrology Present? Yes No
(includes capillary fringe)	wall agrial photos provious inspections	if available:
Describe Recorded Data (stream gauge, monitoring	wen, aenan priotos, previous inspections),	n arandula.
Remarks:		

## WETLAND DETERMINATION DATA FORM - Arid West Region

WETLAND D	ETERMINATION (	DATA FORM -	- Arid West Regio	on wetc
roject/site: Fowler Cree	K. City/C	county Kr	ttitus	_ Sampling Date: 10-18-7
pplicant/Owner:				Sampling Point: DP#
vestigator(s): Ed Sewall			nge:	
ndform (hillslope, terrace, etc.):				
				Datum:
bregion (LRR):			Long.	Datoiii.
il Map Unit Name:			NVVI GIZSSI	ification:
e climatic / hydrologic conditions on the site typical			(If no, explain in	Remarks.)
e Vegetation, Soil, or Hydrology				present? Yes No
e Vegetation, Soil, or Hydrology _	naturally problems	atic? (If ne	eded, explain any ansi	wers in Remarks.)
UMMARY OF FINDINGS - Attach site	map showing saп	apling point le	ocations, transec	ts, important features, etc.
lydrophytic Vegetation Present? Yes	No		•	
lydric Soil Present? Yes	No	Is the Sampled within a Wetlan		No
Vetland Hydrology Present? Yes	No	within a wedan	eur 195	
EGETATION - Use scientific names of	nlante			
:GETATION - Use scientific fiames of	Absolute Don	ninent Indicator	Dominance Test wo	rkehant
ree Stratum (Plot size:)	% Cover Spe	cles? Status	Number of Dominant That Are OBL, FACV	Species /
			Total Number of Don Species Across All S	/
Sapling/Shrub Stratum (Plot size:		tal Cover	Percent of Dominant That Are OBL, FACV	Species ,
1 <del></del>			Prevalence Index w	
·			Total % Cover of	
				x1=
				x2= x3=
				x4=
erb Stratum (Plot size:)	=10	tal Cover		x5=
Phalais and	1 in	Men		(A)(B)
				(-)
				ex = B/A =
			Hydrophytic Vegets	
	<del></del>		Prevalence Inde	
			Morphological A	daptations <sup>1</sup> (Provide supporting irks or on a separate sheet)
	<del></del>			rophytic Vegetation <sup>1</sup> (Explain)
Voody Vine Stratum (Plot size:)		tal Cover		
·	<u> -</u>			soil and wetland hydrology must sturbed or problematic.
D	The state of the s			
	= To	tal Cover	Hydrophytic Vegetation	
6 Bare Ground in Herb Stratum %	Cover of Biotic Crust _			Yes No
Remarks:				
	EE.			

Sampling Point:	DP47
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#### SOIL

Profile Descriptio	n: (Describe t	to the depth ne	eded to document the indic	cator or confirm	the absence of indicators.)
Depth	Matrix		Redox Features		
(inches) C	olor (moist)			ype <sup>1</sup> Loc <sup>2</sup>	Texture Remarks
16 10	The all		cad		95 -
<del></del>					
		·	<del></del>		
-					
1					
			<del></del>		
		) <del></del>			
1- 0.0	D. D		Makin CC-Cavanad at	Control Cand Ca	rains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
			ced Matrix, CS=Covered or unless otherwise noted.)		Indicators for Problematic Hydric Solis <sup>3</sup> :
-	itors: (Applica	able to all LKVs			_
Histosol (A1)	***	_	_ Sandy Redox (S5)		1 cm Muck (A9) (LRR C)
Histic Epipedo			Stripped Matrix (S6)		2 cm Muck (A10) (LRR B)
Black Histic (A		_	Loamy Mucky Mineral (F1		Reduced Vertic (F18)  Red Parent Material (TF2)
Hydrogen Sulf			Loamy Gleyed Matrix (F2	)	
	rs (A5) ( <b>LRR C</b>	·) –	Depleted Matrix (F3)		Other (Explain in Remarks)
1 cm Muck (As			Redox Dark Surface (F6) Depleted Dark Surface (F		
Depleted Belo		(A11)	Redox Depressions (F8)	")	<sup>3</sup> Indicators of hydrophytic vegetation and
Thick Dark Su		_	Vernal Pools (F9)		wetland hydrology must be present,
Sandy Mucky		<del></del>	vernai Fodis (F9)		unless disturbed or problematic.
Sandy Gleyed					dileas distorbed of problemade.
Restrictive Layer					
					10.11.0.10.11.
Depth (inches):					Hydric Soil Present? Yes No
Remarks:					
					<del></del>
HYDROLOGY					
Wetland Hydrolog	y Indicators:				
Primary Indicators	(minimum of o	ne required; che	ck all that apply)		Secondary Indicators (2 or more required)
Surface Water	(A1)		Salt Crust (B11)		Water Marks (B1) (Riverine)
High Water Ta			Biotic Crust (B12)		Sediment Deposits (B2) (Riverine)
Saturation (A3			Aquatic Invertebrates (B	113)	Drift Deposits (B3) (Riverine)
Water Marks (	-	ne)	Hydrogen Sulfide Odor (		Drainage Patterns (B10)
	osits (B2) (Nor		-		ots (C3) Dry-Season Water Table (C2)
	(B3) (Nonriver		Presence of Reduced In		Crayfish Burrows (C8)
Surface Soil C	•	inc,	Recent Iron Reduction in		
	ible on Aerial I	maden (P7)	Thin Muck Surface (C7)	•	Shallow Aquitard (D3)
		magery (Dr)	Other (Explain in Remar		FAC-Neutral Test (D5)
Water-Stained			Other (Capitalit in Nemal	No)	- 1 AC-Neutal Test (Da)
Field Observation					
Surface Water Pres	sent? Ye	es No	Depth (inches):		
Water Table Prese	nt? Yo	es No	Depth (inches):		
Saturation Present		es <u>/</u> No _	Depth (inches): _~_/	Wetl:	and Hydrology Present? Yes No
(includes capillary	hinge)		an utall against what a warning	ue inenasticas	if available:
Describe Recorded	Data (stream	gauge, monitori	ng well, aerial photos, previo	us inspections),	ii avanaule.
Remarks:					

	<b>A</b>
Wetland name or number_	17

Ratings

## RATING SUMMARY – Eastern Washington

Name of wetland (or ID #	#):	Foulu	Creek	by Ecology?	Da Ves	te of site	visit: oct 22  Date of training 9-1	<u>,</u> ^
HGM Class used for ratir								
NOTE: Form is not of Source of base a	- 1			es requested	d (figur	es can be	combined).	
OVERALL WETLAND	CAT	EGORY	(ba	sed on funct	tions	_ or spec	cial characteristics)	
1. Category of we	etland	based (	on FUNCT	IONS			Score for each	
Categ	ory I –	Total sco	re = 22-27				function based on three	'
Categ	ory II -	Total sco	ore = 19-21				ratings (order of rating	js
Categ	ory III	- Total sc	ore = 16-18	8			is not important)	
Categ	ory IV	- Total sc	ore = 9-15					
EUNGTION		roving r Quality	Hydrolog	ie jaki			9 = H,H,H 8 = H,H,M 7 = H,H,L	
		Circle	the appropria	te ratings			7 = H,M,M	
Site Potential	н (	M) L		L (H) M	L		6 = H,M,L	
Landscape Potential		Ø L	H (M)	L (H) M	L		6 = M,M,M	
Value	н	ÎP L	H (M)	L H M	L	TOTAL	5 = H,L,L 5 = M,M,L	
Score Based on		6	1	a		2,	4 = M.I.L	

2. Category based on SPECIAL CHARACTERISTICS of wetland

eHARAGIERI YIIC	CATEGORY Circle the appropriate category
Vernal Pools	II III
Alkali	I
Wetland of High Conservation Value	I
Bog and Calcareous Fens	I
Old Growth or Mature Forest – slow growing	1
Aspen Forest	1
Old Growth or Mature Forest – fast growing	11
Floodplain forest	II
None of the above	

3 = L,L,L



## Maps and figures required to answer questions correctly for Eastern Washington Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes and classes of emergents	D 1.3, H 1.1, H 1.5	
Hydroperiods (including area of open water for H 1.3)	D 1.4, H 1.2, H 1.3	
Location of outlet (can be added to map of hydroperiods)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	D 2.2, D 5.2	
Map of the contributing basin	D 5.3	
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	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which wetland is found (website)	D 3.3	

### Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes and classes of emergents	H 1.1, H 1.5	
Hydroperiods	H 1.2, H 1.3	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the welland (can be added to another figure)	R 2.4	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of wetland vs. width of stream (can be added to another figure)	R 4.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R 3.1	
Screen capture of list of TMDLs for WRIA in which wetland is found (website)	R 3.2, R 3.3	

#### Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes and classes of emergents	L 1.1, L 4.1, H 1.1, H 1.5	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (can be added to another figure)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which wetland is found (website)	L3.3	

## Slope Wetlands

Map of:	o rates web qui attigine sy	Figuresia
Cowardin plant classes and classes of emergents	H 1.1, H 1.5	
Hydroperiods	H 1.2, H 1.3	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of <b>dense</b> , <b>rigid</b> trees, shrubs, and herbaceous plants (can be added to figure above)	S 4.1	
Boundary of area within 150 ft of the wetland (can be added to another figure	ure) S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology websi	te) \$ 3.1, \$ 3.2	
Screen capture of list of TMDLs for WRIA in which wetland is found (websit	e) \$3.3	

Wetland	name	or	number_	

# **HGM Classification of Wetland in Eastern Washington**

For questions 1-4, 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 1-4 apply, and go to Question 5.

	derocous z rappij, and 80 to 4	
1.	of permanent open water (wit	f the following criteria? and is on the water side of the Ordinary High Water Mark of a body hout any plants on the surface) that is at least 20 ac (8 ha) in size r area is deeper than 10 ft (3 m)
	NO - go to 2	YES - The wetland class is Lake Fringe (Lacustrine Fringe)
2.		e can be very gradual), vetland in one direction (unidirectional) and usually comes from as sheetflow, or in a swale without distinct banks;
	NO - go to 3  NOTE: Surface water does not possible shallow depressions or behind hudeep).	YES – The wetland class is <b>Slope</b> nd in these type of wetlands except occasionally in very small and mmocks (depressions are usually <3 ft diameter and less than 1 foot
3.	Does the entire wetland unit mee The unit is in a valley, or strea stream or river; The overbank flooding occurs	m channel, where it gets inundated by overbank flooding from that
	NO - go to 4 NOTE: The Riverine wetland can flooding.	YES – The wetland class is <b>Riverine</b> contain depressions that are filled with water when the river is not
4.	Is the entire wetland unit in a top surface, at some time during the y of the wetland.	ographic depression in which water ponds, or is saturated to the ear. This means that any outlet, if present, is higher than the interior
	NO – go to 5	YES - The wetland class is Depressional
5.	classes. For example, seeps at the stream within a Depressional wet	ficult to classify and probably contains several different HGM base of a slope may grade into a riverine floodplain, or a small land has a zone of flooding along its sides. GO BACK AND IDENTIFY GIMES DESCRIBED IN QUESTIONS 1-4 APPLY TO DIFFERENT

AREAS IN THE WETLAND 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

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within the wetland unit being scored.

	A
Wetland name or number	/ /

**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 wetland 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 + D	epressional	Depressional
Slope + L	ake Fringe	Lake Fringe
/ <sub>1</sub> =	he riverine portion is within of depression)	Depressional
Depressiona	+ Lake Fringe	Depressional
Riverine +	Lake Fringe	Riverine

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.

A
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DER	ESSIONAL WETLANDS	Points Londy L
Water Quality Functions + Indicators ti	nat the site functions to improve water quality	scare per
		govern in the
D 1.0. Does the site have the potential to in	nprove water quality?	
D 1.1. Characteristics of surface water outflows	from the wetland:	
Wetland has no surface water outlet	points = 5	
Wetland has an intermittently flowing ou	tlet points = 3)	
Wetland has a highly constricted perman		72
Wetland has a permanently flowing, unco		~~
	ver) is true clay or true organic (use NRCS definitions of soils)	11-11-11
	YES = 3 NO - 8	<u> </u>
D 1.3. Characteristics of persistent vegetation (E	mergent, Scrub-shrub, and/or Forested Cowardin classes)	
Wetland has persistent, ungrazed, vegeta	tion for $> \frac{2}{3}$ of area points = 53	
Wetland has persistent, ungrazed, vegeta	tion from $\frac{1}{3}$ to $\frac{2}{3}$ of area points = 3	
Wetland has persistent, ungrazed vegeta	tion from $\frac{1}{10}$ to $<\frac{1}{3}$ of area points = 1	5
Wetland has persistent, ungrazed vegeta	tion $< \frac{1}{10}$ of area points = 0	
D 1.4. Characteristics of seasonal ponding or in		
This is the area of ponding that fluctuates	every year. Do not count the area that is permanently ponded.	
Area seasonally ponded is > ½ total area		
Area seasonally ponded is ¼ - ½ total a		
Area seasonally ponded is < ¼ total area		(
Area seasonally policed is 12 total area	or wettand	
Total for D 1	Add the points in the boxes above	9
Rating of Site Potential If score is: 12-16=1	6-11 = M 0-5 = L Record the rating on the	e first page
D 2.0. Does the landscape have the potenti	al to support the water quality function of the site?	
D 2.1. Does the wetland receive stormwater dis	charges? Yes = 1 No = 0	
D 2.2. is > 10% of the area within 150 ft of the		
D 2.3. Are there septic systems within 250 ft of	the wetland? Yes = 1 No = 0	0
D 2.4. Are there other sources of pollutants con	ning into the wetland that are not listed in questions	
D 2,1- D 2,3? Source	Yes = 1 (No = 0)	<b>C</b>
Total for D 2	Add the points in the boxes above	2
Rating of Landscape Potential If score is: 3 c	r4=H 1 or 2=M 0=L Record the rating on the	e first nage
Rating of Landscape Potential 11 Score 15 3	THE TOTAL THE TOTAL METERS OF THE TOTAL METERS	.ojovpugo
The state of the latter than the state of th		i gjara granda
D 3.0. Is the water quality improvement pro		
D 3.1. Does the wetland discharge directly (i.e.,	within 1 mi) to a stream, river, or lake that is on the 303(d) list?	
	Yes = 1 (No = 0)	0
D 3.2. Is the wetland in a basin or sub-basin who	ere water quality is an issue in some aquatic resource [303(d) list,	
eutrophic lakes, problems with nuisance		/
	d or local plan as important for maintaining water quality (answer YES	
if there is a TMDL for the drainage or bas	in in which the wetland is found)? Yes = $2 \text{ No} = 0$	0
Total for D 3	Add the points in the boxes above	1

DEPE	ESSIONAL AWETTANIDS	Points
		(only 1 score per box)
D 4.0. Does the site have the potential to re	duce flooding and erosion?	
D 4.1. Characteristics of surface water outflows	from the wetland:	
Wetland has no surface water outlet	points = 8	
Wetland has an intermittently flowing ou	tlet points = 4	D
Wetland has a highly constricted perman	ently flowing outlet points = 4	
	owing treat wetland as "intermittently flowing")	4
D 4.2. Depth of storage during wet periods: Esti	mate the height of ponding above the bottom of the outlet. For	
wetlands with no outlet, measure from t	e surface of permanent water or deepest part (if dry).	
Seasonal ponding: > 3 ft above the lowes	point in wetland or the surface of permanent ponding points = 8	
, –	pwest point in wetland or the surface of permanent pondingpoints = 6	
The wetland is a headwater wetland	points = 4	
Seasonal ponding: 1 ft - < 2 ft	points = 4	P 4
Seasonal ponding: 6 in - < 1 ft	points = 2	7
Seasonal ponding: < 6 in or wetland has o		-
Total for D 4	Add the points in the boxes above	٥
Rating of Site Potential If score is:12-16 =	H	re first pag
D 5.0. Does the landscape have the potenti	al to support the hydrologic functions of the site?	
D 5.1. Does the wetland receive stormwater dis	charges? Yes = 1 No = 0	)
D 5.2. Is > 10% of the area within 150 ft of the	wetland in a land use that generates runoff?	1
D 5.3. Is more than 25% of the contributing bas	n of the wetland covered with intensive human land uses?	
	Yes = 1 No = 0	0
Total for D 5	Add the points in the boxes above	2
tating of Landscape Potential If score is:3 =	H0 = L Record the rating on to	he first pag
		New Control of Tegens
D 6.0. Are the hydrologic functions provide	The state of the s	
D 6.1. The wetland is in a landscape that has flo		
	conditions around the wetland being rated. Do not add points.	
Choose the highest score if more than on		
	would otherwise flow down-gradient into areas where flooding has	
damaged human or natural resources (e.	g., houses or salmon redds), AND	
Flooding occurs in sub-basin that is	immediately down-gradient of wetland points = 2	
Surface flooding problems are in a	ub-basin farther down-gradient points = 1	
<del>-</del> -	wetland is so constrained by human or natural conditions that the	
water stored by the wetland cannot reac		
Explain why	points = 0	1
There are no problems with flooding dow		,
D.6.2. Has the site has been identified as import	ant for flood storage or flood conveyance in a regional flood control	
plan?	Yes = 2 No = 0	C
Total for D 6	Add the points in the boxes above	1
		h.n. 63
ating of Value If score is: 2-4 = H 1 = N	MO = L Record the rating on t	ne jirst <b>pag</b> i

。在1000年1月1日 1月1日 1月1日 1月1日 1月1日 1日 1	ply to wetlands of all HGM classes. te functions to provide important habitat	(only 1 score per
1.0. Does the wetland have the potential		box)
1 L.U. Does the wetland have the potential	to provide (ignitation many species)	E ALES
11.1. Structure of the plant community:  Check the Cowardin vegetation classes procategory is >= ¾ ac or >= 10% of the wetlow  Aquatic bed	esent and categories of emergent plants. Size threshold for each nd if wetland is < 2.5 ac.	
	gh are the highest layer and have > 30% cover	
Emergent plants >12-40 in (>30-100	cm) high are the highest layer with >30% cover	
	igh are the highest layer with >30% cover	
Scrub-shrub (areas where shrubs have		
Forested (areas where trees have >3		
	2 checks: points = 1	3
	1 check: points = 0	
1.2. Is one of the vegetation types Aquatic Bed	? (es = 1 ) No = 0	١
10% of its area during the March for Lake Fringe wetlands. H 1.3.2. Does the wetland have an interm	pen water (without emergent or shrub plants) over at least ¼ ac OR to early June OR in August to the end of September? Answer YES  Yes = 3 points of the end of September? Answer YES  Yes = 3 points of the end of September? Answer YES  Yes = 3 points of the end of September? Answer YES  Yes = 3 points of the end of September? Answer YES  The end of the end of September? Answer YES  The end of the end of September? Answer YES  Yes = 3 No = 0	3
species can be combined to meet the size	wetland that cover at least 10 ft <sup>2</sup> . Different patches of the same threshold. You do not have to name the species.  rygrass, purple loosestrife, Russian olive, Phragmites, Canadian narisk)  Scoring: > 9 species: points = 2  4-9 species: points = 1  < 4 species: points = 0	2
1.5. Interspersion of habitats		Figure_
Decide from the diagrams below whether and unvegetated areas (open water or muluse map of Cowardin and emergent plant	interspersion among types of plant structures (described in H 1.1), udflats) is high, moderate, low, or none.  classes prepared for questions H 1.1 and map of open water from es or three classes and open water, the rating is always high.	<b>3</b> * - <b>-</b>
None = 0 points Low =	1 point Moderate = 2 points	
three diagrams in this row are ligh = 3 points		
	Riparian braided channels with 2 classes	3

etland name or number		1-2
H 1.6. Special habitat features		
Check, the habitat features that are presentations of Loose rocks larger than 4 in OR larger	nt in the wetland. The number of checks is the number of points. , downed, woody debris (> 4 in diameter) within the area of surface	
ponding or in stream.  Cattails or bulrushes are present wit	hin the wetland	
	om > 4 in) in the wetland or within 30 m (100 ft) of the edge.	
	as that are permanently inundated/ponded.	
Stable steen banks of fine material t	nat might be used by beaver or muskrat for denning (> 45 degree	
slope) OR signs of recent beaver act		
	in each stratum of vegetation (canopy, sub-canopy, shrubs,	4
herbaceous, moss/ground cover)		<u>'</u>
Total for H 1	Add the points in the boxes above	16
Rating of Site Potential If score is: 15-18 = H		
H 2.0. Does the landscape have the potenti	al to support habitat functions of the site?	
H 2.1. Accessible habitat (only area of habitat al		
Calculate: // % undisturbed habitat 3	+ [(% moderate and low intensity land uses)/2] /9 = 35 %	
> 1/3 (33.3%) of 1 km Polygon	(points = 3)	
20-33% of 1km Polygon	points = 2	
10-19% of 1km Polygon	points = 1	9
<10% of 1km Polygon	points = 0	ے
H 2.2. Undisturbed habitat in 1 km Polygon aro		
Calculates 5) W undisturbed habitat 3 9	+ [(% moderate and low intensity land uses)/2] 20 = 7 / %	
Undisturbed habitat > 50% of Polygon	points = 3	
Undisturbed habitat 10 - 50% and in 1-3		
Undisturbed habitat 10 - 50% and > 3 pat	points = 0	3
Undisturbed habitat < 10% of Polygon	points - 0	
H 2.3. Land use intensity in 1 km Polygon:	e points = (- 2)	
> 50% of Polygon is high intensity land us	points = 0	0
Does not meet criterion above		
H 2.4. The wetland is in an area where annual r	infall is less than 12 in, and its water regime is not influenced by old structures. <i>Generally, this means outside boundaries of</i>	
reclamation areas, irrigation districts, or		0
		6
Total for H 2	Add the points in the boxes above	
Rating of Landscape Potential If score is: 4-9	= H1-3 = M< 1 = L Record the rating on the first page	
H 3.0. Is the habitat provided by the site va		
H 3.1. Does the site provide habitat for species	valued in laws, regulations, or policies? Choose the highest score	
that applies to the wetland being rated		
Site meets ANY of the following criteria:	points=2	
<ul> <li>It has 3 or more priority habitats with</li> </ul>		
	Endangered species (any plant or animal on state or federal lists)	
It is mapped as a location for an indi	vidual WDFW species	
- It is a Wetland of High Conservation	Value as determined by the Department of Natural Resources	
	ant habitat site in a local or regional comprehensive plan, in a	
Shoreline Master Plan, or in a waters		
Site has 1 or 2 priority habitats within 10		7
Site does not meet any of the criteria abo	ve points = 0	
Rating of Value If score is: 2 = H 1 = M	0 = L Record the rating on the first page	

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### CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Please determine if the wetland meets the attributes described below and circle the appropriate category. NOTE: A wetland may meet the criteria for more than one set of special characteristics. Record all those that apply. NOTE: All wetlands should also be characterized based on their functions.

Wetland Type Check off any arteria that apply to the wetland	Circle the category when the appropriate oriteria are met.	Centegory
SC 1.0. Vernal pools		
Is the wetland less than 4000 ft <sup>-</sup> , and d	oes it meet at least <b>two</b> of the following criteria?	
	snowmelt from a small contributing basin and has no groundwater	
input.	who to the service of the common registration is temigrally unland	
	only in the spring; the summer vegetation is typically upland	
	te, wetland plants, the wetland is probably NOT a vernal pool.	
	I ft (30 cm)deep] and is underlain by an impermeable layer such as	- Saltitolar
basalt or clay.	120 days during the wet spaces	
<ul> <li>Surface water is present for less that</li> </ul>	Yes – Go to SC 1.1 No = Not a vernal pool	\
and a state of the second and a selectively conditate wheel		,
SC 1.1. Is the vernal pool relatively undisturbed	Go to SC 1.2 No = Not a vernal pool with special characteristics	KV
SC 1.2. Is the vernal pool in an area where ther	e are at least 3 separate aquatic resources within 0.5 mi (other	Cat. II
wetlands, rivers, lakes etc.)?	Yes = Category II No = Category III	Cat. III
		Cat. III
SC 2.0. Alkali wetlands	Harris - automis 2	
Does the wetland meet one of the fo		
— The wetland has a conductivity >		
— The wetland has a conductivity be	tween 2.0 and 3.0 mS, and more than 50% of the plant cover in the	
wetland can be classified as "alkal	" species (see Table 4 for list of plants found in alkali systems).	
— If the wetland is dry at the time of salt.	your field visit, the central part of the area is covered with a layer of	
OR does the wetland unit meet two	f the following three sub-criteria?	
— Salt encrustations around more the		
- More than ¾ of the plant cover co	nsists of species listed on Table 4	
	have a high pH, but please note that some freshwater wetlands	Cot I
may also have a high pH. Thus, ph	alone is not a good indicator of alkali wetlands.	Cat. i
	Yes = Category   No= Not an alkali wetland	
SC 3.0. Wetlands of High Conservation Va	lue (WHCV)	
SC 2.1. Use the WA Department of Natural Peri	ources updated their website to include the list of Wetlands of High	
Conservation Value?	Yes - Go to SC 3.2 No - Go to SC 3.3	
	base as a Wetland of High Conservation Value?	
3C 3.2. IS the wetight listed on the work total	Yes = Category   No = Not a WHCV	Cat. I
SC 3.3. Is the wetland in a Section/Townshin/R	nge that contains a Natural Heritage wetland?	
http://www1.dnr.wa.gov/nhp/refdesk/		
intelline ar war diff. and Post mishi cincout	Yes - Contact WNHP/WDNR and go to SC 3.4 No = Not a WHCW	
SC 3.4. Has WDNR identified the wetland within	the S/T/R as a Wetland of High Conservation Value and it is listed	
on their website?	Yes = Category I No =Not a WHCV	
on their website?	res = category i no =not a wncv	



SC 4.0 Bogs and Calcareous Fens  Does the wetland (or any part of the wetland unit) meet both the criteria for soil	
	s and vegetation in bogs or
calcareous fens? Use the key below to identify if the wetland is a bog or calcareous	
you will still need to rate the wetland based on its functions.	
SC 4.1. Does an area within the wetland have organic soil horizons (i.e., layers of organic	soil), either peats or
mucks, that compose 16 in or more of the first 32 in of the soil profile? See Appe	ndix C for a field key to-
identify organic soils. Yes – Go to	SC 4.3 No - Go to SC 4/2
SC 4.2. Does an area within the wetland have organic soils, either peats or mucks, that a	re less than 16 in deep over
bedrock or an impermeable hardpan such as clay or volcanic ash, or that are floa	
	lo = Is not a bog for rating
SC 4.3. Does an area within the wetland have more than 70% cover of mosses at ground	level AND at least 30% of
	y I bog No - Go to SC 4.4
NOTE: If you are uncertain about the extent of mosses in the understory, you may	y 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 5 are present, the wetland is a bog.	1
SC 4.4. Is an area with peats or mucks forested (> 30% cover) with subalpine fir, western	red cedar, western
hemlock, lodgepole pine, quaking asper, Engelmann spruce, or western white pi	
(or combination of species) listed in Table 5 provide more than 30% of the cover	
Yes = Category	y I bog No – Go to SC 4.5
SC 4.5. Do the species listed in Table 6 comprise at least 20% of the total plant cover with	hin an area of peats and
mucks? Yes = Is a Calcareous Fen for purpose of	
SC 4.6. Do the species listed in Table 6 comprise at least 10% of the total plant cover in a	n area of peats and mucks,
AND one of the two following conditions is met:	1
Marl deposits [calcium carbonate (CaCO <sub>3</sub> ) precipitate] occur on the soil surface	ce or plant stems Cat. i
— The pH of free water is ≥ 6.8 AND electrical conductivity is ≥ 200 uS/cm at mu	Iltiple locations within the
wetland Yes = Is a Category I calcareous fen No	o = Is not a calcareous fen

SC 5.0. Forested Wetlands		
	rooted within its boundary that meets at least one of	
the following three criteria? (Continue on	ly if you have identified that a forested class is present	F 7
in question H 1.1)		Lut 12
— The wetland is within the 100 year f	loodplain of a river or stream	5 te. 10.
Aspen (Populus tremuloides) represen	nts at least 20% of the total cover of woody species	
	wetlands smaller than 2.5 ac) that are "mature" or	
	ions for these priority habitats developed by WDFW	
(see definitions in question H3.1)		
	No = Not a forested wetland with special characteristics	
SC 5.1. Does the wetland have a forest canopy where	more than 50% of the tree species (by cover) are slow	Cat. I
growing native trees (see Table 7)?	Yes = Category   No - Go to SC 5.2	
SC 5.2. Does the wetland have areas where aspen (Po	opulus tremuloides) represents at least 20% of the total cover	Cat. I
of woody species?	Yes = Category   No - Go to SC 5.3	
SC 5.3. Does the wetland have at least $\frac{1}{2}$ acre with a f	orest canopy where more than 50% of the tree species (by	Cat. II
cover) are fast growing species (see Table 7)?		
SC 5.4. Is the forested component of the wetland with		Cat. II
Yes = Category	II No = Not a forested wetland with special characteristics	Cat. II
Category of wetland based on Special Characteristic	CS	
Choose the highest rating if wetland falls into severa	l categories	NA
If you answered No for all types, enter "Not Applicate	ole" on Summary Form	ľ <b>′</b>

## Appendix B: WDFW Priority Habitats in Eastern Washington

Priority habitats listed by WDFW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp. <a href="http://wdfw.wa.gov/publications/00165/wdfw00165.pdf">http://wdfw.wa.gov/publications/00165/wdfw00165.pdf</a> or access the list from here: <a href="http://wdfw.wa.gov/conservation/phs/list/">http://wdfw.wa.gov/conservation/phs/list/</a>)

Count how many of the following priority habitats are within 330 ft (100 m) of the wetland: **NOTE:** This question is independent of the land use between the wetland 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
- **Biodiversity Areas and Corridors**: Areas of habitat that are relatively important to various species of native fish and wildlife (full descriptions in WDFW PHS report).
- Old-growth/Mature forests: Old-growth east of Cascade crest Stands are highly variable in tree species composition and structural characteristics due to the influence of fire, climate, and soils. In general, stands will be >150 years of age, with 10 trees/ac (25 trees/ha) that are > 21 in (53 cm) dbh, and 1-3 snags/ac (2.5-7.5 snags/ha) that are > 12-14 in (30-35 cm) diameter. Downed logs may vary from abundant to absent. Canopies may be single or multi-layered. Evidence of human-caused alterations to the stand will be absent or so slight as to not affect the ecosystem's essential structures and functions. 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 and 80-160 years old east of the Cascade crest.
- Oregon White Oak: Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (full descriptions in WDFW PHS report p. 158 see web link above).
- Riparian: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.
- **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.
- Caves: A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.
- Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.
- Talus: Homogenous areas of rock rubble ranging in average size 0.5 6.5 ft (0.15 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.
- Snags and Logs: Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 12 in (30 cm)in eastern 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.
- Shrub-steppe: A nonforested vegetation type consisting of one or more layers of perennial bunchgrasses and a conspicuous but discontinuous layer of shrubs (see Eastside Steppe for sites with little or no shrub cover).
- Eastside Steppe: Nonforested vegetation type dominated by broadleaf herbaceous flora (i.e., forbs), perennial bunchgrasses, or a combination of both. Bluebunch wheatgrass (*Pseudoroegneria spicata*) is often the prevailing cover component along with Idaho fescue (*Festuca idahoensis*), Sandberg bluegrass (*Poa secunda*), rough fescue (*F. campestris*), or needlegrasses (*Achnatherum* spp.).
- Juniper Savannah: All juniper woodlands.

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.

Wetland Rating System for Eastern WA: 201# Update

	12
Wetland name or number_	1

# **RATING SUMMARY – Eastern Washington**

Name of wetland (or ID #):	Trained by E	cology? _Yes	site visit: Oct 22  No Date of training	9-17
NOTE: Form is not comple Source of base aerial p		quested (figures ca	M classes?Y n be combined).	_N
OVERALL WETLAND CAT	EGORY (based	on functions or s	special characteristics	)

## 1. Category of wetland based on FUNCTIONS

	Total score = 22-27
	Total score = 19-21
Category III	-Total score = 16-18
Category IV	Total score = 9-15

FUNCTION	W	lm) ate	rov r Q	ing uality	1	ydrolo	glc	7	labit	<b>ot</b>	
				Circle	e the d	ppropr	iate r	atings			
Site Potential	Н	(	M)	L	Н	М	D	Н	М		
Landscape Potential	Н	(	M	L	Н	M	L	(H)	М	L	
Value	Н	(	D	L	Н	M	L	1	М	L	TOTAL
Score Based on Ratings		8	6			5		-	7		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 Circle the appropriate category
Vernal Pools	II III
Alkali	I
Wetland of High Conservation Value	I
Bog and Calcareous Fens	I
Old Growth or Mature Forest – slow growing	I
Aspen Forest	I
Old Growth or Mature Forest fast growing	II
Floodplain forest	II
None of the above	

### Maps and figures required to answer questions correctly for Eastern Washington Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes and classes of emergents	D 1.3, H 1.1, H 1.5	
Hydroperiods (including area of open water for H 1.3)	D 1.4, H 1.2, H 1.3	
Location of outlet (can be added to map of hydroperiods)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (can be added to anoti	her figure) D 2.2, D 5.2	
Map of the contributing basin	D 5.3	
1 km Polygon: Area that extends 1 km from entire wetland edge - inc polygons for accessible habitat and undisturbed habitat	luding H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology	website) D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which wetland is found (v	website) D 3.3	

### **Riverine Wetlands**

Map of:	To answer questions:	gure#
Cowardin plant classes and classes of emergents	H 1.1, H 1.5	
Hydroperiods	H 1.2, H 1.3	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (can be added to another figur	e) R 2.4	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of wetland vs. width of stream (can be added to another figure)	R 4.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website	) R 3.1	
Screen capture of list of TMDLs for WRIA in which wetland is found (website)		

### Lake Fringe Wetlands

Map of:		6 answer questions	Figure I
Cowardin plant classes and classes of emerg		L 1.1, L 4.1, H 1.1, H 1.5	
Plant cover of trees, shrubs, and herbaceous	is plants	L 1.2	
Boundary of area within 150 ft of the wetlar	nd (can be added to another figure)	L 2.2	
1 km Polygon: Area that extends 1 km from polygons for accessible habitat and undistur	entire wetland edge - including	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed water		L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in		L3.3	

#### Slope Wetlands

Map of:		To answer questions:	Figure #
Cowardin plant classes and classes of em		H 1.1, H 1.5	
Hydroperiods		H 1.2, H 1.3	
Plant cover of dense trees, shrubs, and I	erbaceous plants	S 1.3	
Plant cover of <b>dense</b> , <b>rigid</b> trees, shrubs, (can be added to figure above)	and herbaceous plants	S 4.1	
Boundary of area within 150 ft of the we	land (can be added to another figure)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km fro		H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed w	aters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA	in which wetland is found (website)	S 3.3	

## **HGM Classification of Wetland in Eastern Washington**

For questions 1-4, 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 1-4 apply, and go to Question 5.

	the contract of the contract o	The Court of the C
1.	The vegetated part of the wetl of permanent open water (with	f the following criteria? and is on the water side of the Ordinary High Water Mark of a body hout any plants on the surface) that is at least 20 ac (8 ha) in size r area is deeper than 10 ft (3 m)
_	NO - go to 2	YES - The wetland class is Lake Fringe (Lacustrine Fringe)
2.	Does the entire wetland unit mee The wetland is on a slope (slope)The water flows through the value seeps. It may flow subsurfaceThe water leaves the wetland	ve can be very gradual), vetland in one direction (unidirectional) and usually comes from as sheetflow, or in a swale without distinct banks;
	NO - go to 3  NOTE: Surface water does not possible shallow depressions or behind hudeep).	YES – The wetland class is <b>Slope</b> nd in these type of wetlands except occasionally in very small and mmocks (depressions are usually <3 ft diameter and less than 1 foot
3.	Does the entire wetland unit mee The unit is in a valley, or strea stream or river; The overbank flooding occurs	m channel, where it gets inundated by overbank flooding from that
	NO - go to 4 NOTE: The Riverine wetland can flooding.	YES – The wetland class is <b>Riverine</b> contain depressions that are filled with water when the river is not
4.	Is the entire wetland unit in a top surface, at some time during the y of the wetland.	ographic depression in which water ponds, or is saturated to the ear. This means that any outlet, if present, is higher than the interior
	NO – go to 5	YES - The wetland class is Depressional
5.	Your wetland unit seems to be disclasses. For example, seeps at the	ficult to classify and probably contains several different HGM base of a slope may grade into a riverine floodplain, or a small

5. 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 1-4 APPLY TO DIFFERENT AREAS IN THE WETLAND 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.

				12
Wetland	name	or	number	

**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 wetland unit; classify the wetland using the class that represents more than 90% of the total area.

HGI	M classes within the	wetland unit being rated	HGM Class to use in rating
	Slope +	Riverine	Riverine
	Slope + D	epressional	Depressional
	Slope + L	ake Fringe	Lake Fringe
Depre		ne riverine portion is within of depression)	Depressional
	Depressiona	+ Lake Fringe	Depressional
	Riverine +	Lake Fringe	Riverine

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.

DEPR	ESSIONAL WETLANDS	Points .
	at the site functions to improve water quality	(onle L score per
D 1.0. Does the site have the potential to in	prove water quality?	
D 1.1. Characteristics of surface water outflows		
Wetland has no surface water outlet	points = 5	
Wetland has an intermittently flowing ou		
Wetland has a highly constricted perman	•	5
Wetland has a permanently flowing, unco	,	-3
	er) is true clay or true organic (use NRCS definitions of soils)	
O 1.2. The son 2 in below the surface (or don'ts)	YES = 3 NO = 0	0
D 1.3. Characteristics of persistent vegetation (E	mergent, Scrub-shrub, and/or Forested Cowardin classes)	
Wetland has persistent, ungrazed, vegeta	tion for $> \frac{2}{3}$ of area points = 5	
Wetland has persistent, ungrazed, vegeta	tion from $\frac{1}{3}$ to $\frac{2}{3}$ of area points = 3	
Wetland has persistent, ungrazed vegetal	ion from $\frac{1}{10}$ to $< \frac{1}{3}$ of area points = 1	5
Wetland has persistent, ungrazed vegetal	$ion < \frac{1}{10}$ of area points = 0	ر
D 1.4. Characteristics of seasonal ponding or inu		
	every year. Do not count the area that is permanently ponded.	
Area seasonally ponded is > ½ total area		
Area seasonally ponded is ¼ -½ total at	F	ł.
Area seasonally ponded is < ¼ total area		00
Area seasonony portoca ta 474 total area		
Total for D 1	Add the points in the boxes above	10
Rating of Site Potential If score is:12- 16 = H	6-11 = M0-5 = L Record the rating on the	he first page
D 2.0. Does the landscape have the potenti	al to support the water quality function of the site?	
D 2.1. Does the wetland receive stormwater dis	charges? Yes = 1 No = 0	)
D 2.2. Is > 10% of the area within 150 ft of the	vetland in land uses that generate pollutants?	1
D 2.3. Are there septic systems within 250 ft of		0
D 2.4. Are there other sources of pollutants con	ing into the wetland that are not listed in questions	
D 2.1- D 2.3? Source	Yes = 1 No = 0	0
Total for D 2	Add the points in the boxes above	7
		ha firet naga
Rating of Landscape Potential If score is:3 o	4 = H1 or 2 = M0 = L Record the rating on t	ie jii st puye
		ar ere sarrei.
D 3.0. Is the water quality improvement pro		a ku sa da da da L
D 3.1. Does the wetland discharge directly (i.e.,	within 1 mi) to a stream, river, or lake that is on the 303(d) list?  Yes = 1 No = 0	
Book to the constant of the charter of the control	re water quality is an issue in some aquatic resource [303(d) list,	
eutrophic lakes, problems with nuisance		,
	d or local plan as important for maintaining water quality (answer YES	0
if there is a TMDL for the drainage or bas		
Total for D 3	Add the points in the boxes above	1
Rating of Value If score is: 2-4 = H 1=1	N 0 = L Record the rating on t	he first page

4.0. Does the site have the potential to reduce flooding and erosion?  4.1. Characteristics of surface water outlet Wetland has no surface water outlet Wetland has no surface water outlet Wetland has an internitrently flowing outlet Wetland has a highly constricted permanently flowing outlet Wetland has a highly constricted permanently flowing outlet Wetland has a bighly constricted permanently flowing outlet Wetland has a permanently flowing surface outlet (if outlet is a ditch and not permanently flowing treat wetland as internitrently flowing')  4.2. Depth of storage during wet periods: Estimate the height of panding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or deepest part [if dy.)  Seasonal ponding: 2 ft - 2 ft a above the lowest point in wetland or the surface of permanent ponding points = 8  Seasonal ponding: 2 ft - 2 ft a bove the lowest point in wetland or the surface of permanent ponding points = 4  Seasonal ponding: 6 in - < 1 ft  Seasonal ponding: 7 ft - < 1 ft  Seasonal ponding: 6 in - < 1 ft  Seasonal ponding: 7 ft - < 1 ft  Seasonal ponding: 6 in - < 1 ft  Seasonal ponding: 6 in - < 1 ft  Seasonal ponding: 7 ft - < 1 ft  Seas	<b>6)</b> 29:11		elites
4.1. Characteristics of surface water outflows from the wetland:  Wetland has no surface water outlet  Wetland has an intermittently flowing outlet  Wetland has a picture of the points of the wetland has a permanently flowing outlet  Wetland has a permanently flowing outlet  Wetland has a permanently flowing unconstricted surface outlet  (If outlet is a drich and not permanently flowing the wetland as "intermittently flowing")  4.2. Death 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 of deepest part (If dry).  Seasonal ponding: 3 ft above the lowest point in wetland or the surface of permanent ponding points = 8  Seasonal ponding: 2 ft < 3 ft above the lowest point in wetland or the surface of permanent ponding points = 4  points = 6  The wetland is a headwater wetland  Seasonal ponding: 6 in or wetland has only saturated soils  Add the points in the boxes above betain of 1 ft score is: 12-16 = 1			(only 1 score per bax)
4.1. Characteristics of surface water outflows from the wetland:  Wetland has no surface water outlet  Wetland has an intermittently flowing outlet  Wetland has a picture of the points of the wetland has a permanently flowing outlet  Wetland has a permanently flowing outlet  Wetland has a permanently flowing unconstricted surface outlet  (If outlet is a drich and not permanently flowing the wetland as "intermittently flowing")  4.2. Death 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 of deepest part (If dry).  Seasonal ponding: 3 ft above the lowest point in wetland or the surface of permanent ponding points = 8  Seasonal ponding: 2 ft < 3 ft above the lowest point in wetland or the surface of permanent ponding points = 4  points = 6  The wetland is a headwater wetland  Seasonal ponding: 6 in or wetland has only saturated soils  Add the points in the boxes above betain of 1 ft score is: 12-16 = 1	DAA Developed to be a standard to pro-	dura flooding and erosion?	
Wetland has an intermittently flowing outlet Wetland has a highly constricted permanently flowing outlet Wetland has a permanently flowing unconstricted surface outlet Wetland has a permanently flowing unconstricted surface outlet (If outlet is a dirch and not permanently flowing unconstricted surface outlet (If outlet is a dirch and not permanently flowing trave wetland as "intermittently flowing")  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 deepest part (If dry). Seasonal ponding: 2 ft -< 3 ft above the lowest point in wetland or the surface of permanent ponding points = 8 Seasonal ponding: 2 ft -< 2 ft Seasonal ponding: 1 ft -< 2 ft Seasonal ponding: 6 in -< 1 ft Seasonal ponding: 7 in -< 2 ft Seasonal ponding: 6 in -< 1 ft Seasonal ponding: 6 in -< 1 ft Seasonal ponding: 7 in -< 2 ft Seasonal ponding: 7 in -< 2 ft Seasonal ponding: 7 in - Seasonal ponding: 8 in -< 1 ft Seasonal ponding: 9 in - <li>5.0. Does the landscape have the potential to support the hydrologic functions of the site?  5.1. Does the wetland receive stormwater discharges?  Ves = No = 0 / Ves</li>			in the second
Wetland has an intermittently flowing outlet Wetland has a highly constricted permanently flowing outlet Wetland has a permanently flowing unconstricted surface outlet (If outlet is a ditch and not permanently flowing treat wetland as "intermittently flowing")  4.2. Depth of storage during wet periods. Estmate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or deepest part (If dry). Seasonal ponding: 3 ft a bove the lowest point in wetland or the surface of permanent ponding points = 8 Seasonal ponding: 2 ft - 2 ft a bove the lowest point in wetland or the surface of permanent ponding points = 6 The wetland is a headwater wetland Seasonal ponding: 6 in - 2 ft Seasonal ponding: 6 in - 4 lft Seasonal ponding: 6 in - 4 lft Seasonal ponding: 6 in or wetland has only saturated soils Datal for D 4  Add the points in the boxes above  Add the points in the boxes above  Add the points in the boxes above  Add the points in the post of the site?  5.0. Does the landscape have the potential to support the hydrologic functions of the site?  5.1. Does the wetland receive stormwater discharges?  Yes = No = 0  Add the points in the boxes above  Add the points in the post of the vetland in a land use that generates runoff?  Yes = No = 0  Add the points in the boxes above  Cotal for D 5  Add the points in the boxes above  Add the points in the boxes above  Cotal for D 5  Add the points in the boxes above  Choose the highest score if more than one conditions around the wetland being rated. Do not add points.  Choose the highest score if more than one condition is met.  The wetland capturers surface water that would otherwise flow down-gradient into areas where flooding has damaged human or natural resources (e.g., houses or summor redds), AND  Flooding occurs in sub-basin that is immediately down-gradient of wetland  Surface flooding problems are in a bub-basin farther down-gradient of wetland  Doints = 0  Flooding or potential outflow from the wetland			
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Wethand has a permanenthy flowing unconstricted surface outlet (ff outlet is a dirch and not permanenthy filowing tree wetland as 'intermittently flowing')  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 deepest part (if dry). Seasonal ponding: 2 ft - < 3 ft above the lowest point in wetland or the surface of permanent ponding points = 8 Seasonal ponding: 2 ft - < 3 ft above the lowest point in wetland or the surface of permanent ponding points = 6 points = 4 Seasonal ponding: 1 ft - < 2 ft Seasonal ponding: 1 ft - < 2 ft Seasonal ponding: 6 in - < 1 ft Seasonal ponding: 7 ft - < 1 ft Seasonal ponding: 7 ft - < 1 ft Seasonal ponding: 7 ft - < 1 ft Seasonal ponding: 8 ft - < 1 ft Seasonal ponding: 9 ft - < 1 ft Seasonal			l
(If outlet is a ditch and not permanently flowing treat wetland as "intermittently flowing")  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 deepest part (If dry).  Seasonal ponding: 2 ft - < 3 ft above the lowest point in wetland or the surface of permanent ponding points = 8  Seasonal ponding: 2 ft - < 3 ft above the lowest point in wetland or the surface of permanent ponding points = 6  The wetland is a headwater wetland  Seasonal ponding: 6 in - < 1 ft Seasonal po	Wetland has a highly constricted permane	ently flowing outlet points = 4	/\
wetlands with no outlet, measure from the surface of permanent water or deepest part (if dry).  Seasonal ponding: 3 ft above the lowest point in wetland or the surface of permanent ponding points = 8 Seasonal ponding: 2 ft -< 3 ft above the lowest point in wetland or the surface of permanent pondingpoints = 6 The wetland is a headwater wetland Seasonal ponding: 1 ft -< 2 ft Seasonal ponding: 1 ft -< 2 ft Seasonal ponding: 6 in -< 1 ft Seasonal ponding: 6 in ror wetland has only saturated soils  Datal for D 4  Add the points in the boxes above  Add the points in the boxes above  4.  5.0. Does the landscape have the potential to support the hydrologic functions of the site?  5.1. Does the wetland receive stormwater discharges?  5.2. Is > 10% of the area within 150 ft of the wetland in a land use that generates runoff?  5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses?  Yes = 1 No = 0  Add the points in the boxes above  2.  Add the points in the boxes above  4.  Add the points in the boxes above  Add the points in the boxes above  5.0. Does the wetland receive stormwater discharges?  Add the points in the boxes above  Add the points in the boxes above  5.1. The wetland is in a landscape that has flooding problems.  Choose the hydrologic functions provided by the site valuable to society?  6.1. The wetland is in a landscape that has flooding problems.  Choose the highest score if more than one conditions 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), AND  Flooding occurs in sub-basin that is immediately down-gradient of wetland  Surface flooding problems are in a sub-basin farther down-gradient of wetland  Doints = 0  Foints = 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  There are no problems w	(If outlet is a ditch and not permanently flo	100.1000.000.000	7
Seasonal ponding: > 3 ft above the lowest point in wetland or the surface of permanent ponding points = 8 Seasonal ponding: 2 ft - < 3 ft above the lowest point in wetland or the surface of permanent pondingpoints = 6 The wetland is a headwater wetland Seasonal ponding: 1 ft - < 2 ft Seasonal ponding: 1 ft - < 2 ft Seasonal ponding: 6 in - < 1 ft Seasonal ponding: 6 in - or wetland has only saturated soils  Datal for D 4 Add the points in the boxes above Add the points in sub-basin that is in mediately down-gradient of wetland Add points.  Choose the highest score if more than one conditions around the wetland being rated. Do not add points.  Choose the highest score if more than one conditions around the wetland being rated. Do not add points.  Choose the highest score if more than one conditions around the wetland being rated. Do not add points.  Choose the highest score if more than one conditions around the wetland being rated. Do not add points.  Choose the highest score if more than one conditions around the wetland being rated. Do not add points.  Choose the highest points in sub-basin that is immediately down-gra	0 4.2. Depth of storage during wet periods: Estim	nate the height of ponding above the bottom of the outlet. For	
Seasonal ponding: 2 ft - < 3 ft above the The wetland is a headwater wetland Seasonal ponding: 1 ft - < 2 ft Seasonal ponding: 6 in - < 1 ft Seasonal ponding: 6 in or wetland has only saturated soils  Dotal for D 4  Add the points in the boxes above Arting of Site Potential If score is: 12-16 = H6-11 = M0-5 = L	wetlands with no outlet, measure from the	e surface of permanent water or deepest part (if dry).	
The wetland is a headwater wetland Seasonal ponding: 1ft - 2 ft Seasonal ponding: 1ft - 2 ft Seasonal ponding: 6 in - x 1 ft Seasonal ponding: 7 in - x 1 ft Seasonal ponding: 8 in - x 1 ft Points: 9	Seasonal ponding: > 3 ft above the lowest	point in wetland or the surface of permanent ponding points = 8	
Seasonal ponding: 1 ft - < 2 ft Seasonal ponding: 6 in - < 1 ft Seasonal ponding: 6 in or wetland has only saturated soils  Add the points in the boxes above  Add the points in the boxes above  5.0. Does the landscape have the potential to support the hydrologic functions of the site?  5.1. Does the wetland receive stormwater discharges?  5.2. Is > 10% of the area within 150 ft of the wetland in a land use that generates runoff?  5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses?  5.4. Is not the hydrologic functions provided by the site valuable to society?  6.5. Are the hydrologic functions provided by the site valuable to society?  6.6. Are the hydrologic functions provided by the site valuable to society?  6.1. The wetland is in a landscape that has flooding problems.  Choose the description that best matches conditions around the wetland 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), AND  Flooding occurs in sub-basin that is immediately down-gradient of wetland  Surface flooding problems are in a sub-basin farther down-gradient of wetland  Surface flooding problems are in a sub-basin farther down-gradient of wetland  Surface flooding problems are in a rareas that flood.  Explain why  There are no problems with flooding downstream of the wetland  points = 0  Add the points in the boxes above  Add the points in the boxes above			
Seasonal ponding: 6 in < 1 ft Seasonal ponding: 6 in < 1 ft Seasonal ponding: 6 in < 1 ft Seasonal ponding: 6 in or wetland has only saturated soils  Add the points in the boxes above  Add the points in the boxes above  Add the points in the boxes above  Fishing of Site Potential  Add the points in the boxes above  Fishing of Site Potential  Add the points in the boxes above  Fishing of Site Potential  Add the points in the boxes above  Fishing of Site Potential  Fishing of S			
Seasonal ponding: < 6 in or wetland has only saturated soils  Add the points in the boxes above  Solution of Site Potential  If score is:12.16 = H6-11 = M0-5 = L		•	
Add the points in the boxes above    Solution of Site Potential   If score is:   12-16 =			0
S.O. Does the landscape have the potential to support the hydrologic functions of the site?  5.1. Does the wetland receive stormwater discharges?  5.2. Is > 10% of the area within 150 ft of the wetland in a land use that generates runoff?  5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses?  Yes = 1 No = 0 /  5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses?  Yes = 1 No = 0 /  Solution of Landscape Potential if score is: 3 = H 1 or 2 = M 0 = L Record the rating on the first positing of Landscape Potential if score is: 3 = H 1 or 2 = M 0 = L Record the rating on the first positing of Landscape that has flooding problems.  Choose the hydrologic functions provided by the site valuable to society?  6.1. The wetland is in a landscape that has flooding problems.  Choose the description that best matches conditions around the wetland 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), AND  Flooding occurs in sub-basin that is immediately down-gradient of wetland  Surface flooding problems are in a sub-basin farther down-gradient  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  Add the points in the boxes above	Total for D 4	m, countries and	4
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5.1. Does the wetland receive stormwater discharges?  5.2. Is > 10% of the area within 150 ft of the wetland in a land use that generates runoff?  5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses?  Yes = 1 No = 0  Add the points in the boxes above  The wetland is in a landscape Potential. If score is:3 = H1 or 2 = M0 = L  Record the rating on the first positions around the wetland being rated. Do not add points.  Choose the description that best matches conditions around the wetland 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), AND  Flooding occurs in sub-basin that is immediately down-gradient of wetland  Surface flooding problems are in a sub-basin farther down-gradient  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	toting of otto voterior		
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6.0. Are the hydrologic functions provided by the site valuable to society?  6.1. The wetland is in a landscape that has flooding problems.  Choose the description that best matches conditions around the wetland being rated. Do not add points.  Choose the highest score if more than one condition is met.  The wetland captures surface water that damaged human or natural resources (e.g., houses or salmon redds), AND  Flooding occurs in sub-basin that is immediately down-gradient of wetland points = 2  Surface flooding problems are in a sub-basin farther down-gradient  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  Place of the rating on the first points and the first points in the boxes above of the strain of the first points and the first points are first points.  Add the points in the boxes above points and the first points and the first points are first points.  Add the points in the first points are first points.  Add the points in the first points are first points.  Add the points in the first points.  Add the points in th	D 5.3. Is more than 25% of the contributing basin	n of the wetland covered with intensive human land uses?  Yes = 1 No = 0	0
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There are no problems with flooding downstream of the wetland  6.2. Has the site has been identified as important for flood storage or flood conveyance in a regional flood control plan?  Otal for D 6  Add the points in the boxes above	Explain why	points = 0	1
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otal for D 6  Add the points in the boxes above	1	ant for flood storage or flood conveyance in a regional flood control Yes = 2 No = 0	) C
	Total for D 6	Add the points in the boxes above	,
	ating of Value If score is: 2-4 = H 1 = M	O = L Record the rating on the	ne first pag

<ul> <li>These questions apply to wetlands of all HGM classes.</li> </ul>	(coly1
HABITAT FUNCTIONS - Indicators that site functions to provide important habitat	score per boxi
H 1.0. Does the wetland have the potential to provide habitat for many species?	
H 1.1. Structure of the plant community:  Check the Cowardin vegetation classes present and categories of emergent plants. Size threshold for each category is >= ¼ ac or >= 10% of the wetland if wetland is < 2.5 ac.  Aquatic bed  Emergent plants 0-12 in (0-30 cm) high are the highest layer and have > 30% cover	h
Emergent plants >12-40 in (>30-100 cm) high are the highest layer with >30% cover  Emergent plants > 40 in (> 100 cm) high are the highest layer with >30% cover	
Scrub-shrub (areas where shrubs have >30% cover)  Forested (areas where trees have >30% cover)  3 checks: points 2 checks: points 1 check: points	=2
H 1.2. Is one of the vegetation types Aquatic Bed?  Yes = 1 No	=0 0
H 1.3. Surface water  H 1.3.1. Does the wetland have areas of open water (without emergent or shrub plants) over at least ½ a 10% of its area during the March to early June OR in August to the end of September? Answer for Lake Fringe wetlands.  Yes = 3 points & go to H 1.4 No = go to H 1  H 1.3.2. Does the wetland have an intermittent or permanent, and unvegetated stream within its bound or along one side, over at least ¼ ac or 10% of its area? Answer yes only if H 1.3.1 is No.  Yes = 3 No.	YES 3.2) laries,
H 1.4. Richness of plant species  Count the number of plant species in the species can be combined to meet the size threshold. You do not have to name the species.  Do not include Eurasian milfoil, reed can arygrass, purple loosestrife, Russian olive, Phragmites, Canadian thistle, yellow-flag iris, and saltcedar (Tamarisk)  # of species  Scoring: > 9 species: points  4-9 species: points	;=2 =10
H 1.5. Interspersion of habitats  Decide from the diagrams below whether interspersion among types of plant structures (described in H and unvegetated areas (open water or mudflats) is high, moderate, low, or none.  Use map of Cowardin and emergent plant classes prepared for questions H 1.1 and map of open water for H 1.3. 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 = 3 points	
Rinarian braided channels with 2 class	202

tland name or number	I
1 1.6. Special habitat features	
Check the habitat features that are present in the wetland. The number of checks is the number of points.  Loose rocks larger than 4 in OR large downed, woody debris (> 4 in diameter) within the area of surface ponding or in stream.	
Captails or bulrushes are present within the wetland.	
standing snags (diameter at the bottom > 4 in) in the wetland or within 30 m (100 ft) of the edge.	
Emergent or shrub vegetation in areas that are permanently inundated/ponded.	
Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 45 degree	
slope) OR signs of recent beaver activity	1
Invasive species cover less than 20% in each stratum of vegetation (canopy, sub-canopy, shrubs,	1 1
herbaceous, moss/ground cover)	+ ,,
Total for H 1 Add the points in the boxes above	1 4
ating of Site Potential If score is: 15-18 = H 7-14 = M 0-6 = L Record the rating on the first page	
1 2.0. Does the landscape have the potential to support habitat functions of the site?	
12.1. Accessible habitat (only area of habitat abutting wetland). If total accessible habitat is:	1
Calculate: $\frac{1}{2}$ % undisturbed habitat $\frac{3}{7}$ + [(% moderate and low intensity land uses)/2] = $\frac{3}{2}$ %	
$> \frac{1}{3}$ (33.3%) of 1 km Polygon points = 3	`
20-33% of 1km Polygon points = 2	
10-19% of 1km Polygon points = 1	
<10% of 1km Polygon points = 0	3
1 2.2. Undisturbed habitat in 1 km Polygon around wetland.	
Calculate: 5/% undisturbed habitat 39 + [(% moderate and low intensity land uses)/2] 20 = 71 %	
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	13
Undisturbed habitat < 10% of Polygon points = 0	)
H 2.3. Land use intensity in 1 km Polygon:	
> 50% of Polygon is high intensity land use points = (-2)	
Does not meet criterion above	-
H 2.4. The wetland is in an area where annual rainfall is less than 12 in, and its water regime is not influenced by	
irrigation practices, dams, or water control structures. Generally, this means outside boundaries of	
reclamation areas, irrigation districts, or reservoirs  Yes = No = 0	
, constitution areas, in general,	6
ating of Landscape Potential If score is: 4-9 = 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?	
13.1. Does the site provide habitat for species valued in laws, regulations, or policies? Choose 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 Appendix B)	
It provides habitat for Threatened or Endangered species (any plant or animal on state or federal lists)	
It is mapped as a location for an individual WDFW species	
It is mapped as a location for an individual vapi as species	
It is mapped as a location for all mondate with wispectes 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 Natural Resources	1
<ul> <li>It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</li> <li>It has been categorized as an important habitat site in a local or regional comprehensive plan, in a</li> </ul>	-

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### **CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS**

Please determine if the wetland meets the attributes described below and circle the appropriate category. NOTE: A wetland may meet the criteria for more than one set of special characteristics. Record all those that apply. NOTE: All wetlands should also be characterized based on their functions.

Wedged Type	Category
Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.	
SC 1.0. Vernal pools	
Is the wetland less than 4000 ft <sup>2</sup> , and does it meet at least two of the following criteria?	
— Its only source of water is rainfall or snowmelt from a small contributing basin and has no groundwater	
input.	
— Wetland plants are typically present only in the spring; the summer vegetation is typically upland	
annuals. If you find perennial, obligate, wetland plants, the wetland is probably NOT a vernal pool.	
— The soil in the wetland is shallow [< 1 ft (30 cm)deep] and is underlain by an impermeable layer such as	
basalt or clay.	
- Surface water is present for less than 120 days during the wet season.	
Yes – Go to SC 1.1 No = Not a vernal pool	
SC 1.1. Is the vernal pool relatively undisturbed in February and March?	
Yes - Go to SC 1.2 No = Not a vernal pool with special characteristics	P30" 145
SC 1.2. Is the vernal pool in an area where there are at least 3 separate aquatic resources within 0.5 mi (other	
wetlands, rivers, lakes etc.)? Yes = Category II No = Category III	Cat. II
	Cat. III
SC 2.0. Alkali wetlands	Ī
Does the wetland meet one of the following criteria?	1
The wetland has a conductivity > 30 mS/cm.	
The wetland has a conductivity between 2.0 and 3.0 mS, and more than 50% of the plant cover in the	
wetland can be classified as "alkali" species (see Table 4 for list of plants found in alkali systems).  — If the wetland is dry at the time of your field visit, the central part of the area is covered with a layer of	f
salt.	· I
OR does the wetland unit meet two of the following three sub-criteria?	1
— Salt encrustations around more than 75% of the edge of the wetland	ì
More than ¾ of the plant cover consists of species listed on Table 4	1
— A pH above 9.0. All alkali wetlands have a high pH, but please note that some freshwater wetlands	1
may also have a high pH. Thus, pH alone is not a good indicator of alkali wetlands.	Cat. I
Yes = Category I No= Not an alkali wetland	7
	270
SC 3.0. Wetlands of High Conservation Value (WHCV)	
SC 3.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High	1
Conservation Value? Yes – Go to SC 3.2 No – Go to SC 3.3	1
SC 3.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?	1
Yes = Category   No = Not a WHCV	Cat. 1
SC 3.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland?	
	7
http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf	V
http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf  Yes Contact WNHP/WDNR and go to SC 3.4 No = Not a WHCV	7
	1

SC 4.0 Bogs and Calcareous Fens		
Does the wetland (or any part of the we	tland unit) meet both the criteria for soils and vegetation in bogs or	
calcareous fens? Use the key below to id	entify if the wetland is a bog or calcareous fen. <b>If you answer yes</b>	
you will still need to rate the wetland b		
C 4.1. Does an area within the wetland have or	ganic soil horizons (i.e., layers of organic soil), either peats or	
mucks, that compose 16 in or more of the	e first 32 in of the soil profile? See Appendix C for a field key to	
identify organic soils.	Yes - Go to SC 4(3 No - Go to SC 4,2	
	ganic soils, either peats or mucks, that are less than 16 in deep over	
bedrock or an impermeable hardpan su	h as clay or volcanic ash, or that are floating on top of a take or	
pond?	Yes – Go to SC 4.3 (No = Is not a bog for rating	
C 4.3. Does an area within the wetland have m	ore than 70% cover of mosses at ground level AND at least 30% of	
the total plant cover consists of species		
NOTE: If you are uncertain about the ex	ent of mosses in the understory, you may substitute that criterion	
by measuring the pH of the water that s	eeps into a hole dug at least 16 in deep. If the pH is less than 5.0	
and the plant species in Table 5 are pres		
	> 30% cover) with subalpine fir, western red cedar, western	
hemlock, lodgepole pine, quaking aspen	Engelmann spruce, or western white pine, AND any of the species	Cat. I
(or combination of species) listed in Tab	e 5 provide more than 30% of the cover under the canopy?	COLI
	Yes = Category I bog No - Go to SC 4.5	
C 4.5. Do the species listed in Table 6 comprise	at least 20% of the total plant cover within an area of peats and	
mucks?	Yes = Is a Calcareous Fen for purpose of rating No – Go to SC 4.6	
C 4.6. Do the species listed in Table 6 comprise	at least 10% of the total plant cover in an area of peats and mucks,	
AND one of the two following conditions		
	CO <sub>3</sub> ) precipitate] occur on the soil surface or plant stems	Cat. I
	ctrical conductivity is ≥ 200 uS/cm at multiple locations within the	
wetland	Yes = Is a Category I calcareous fen No = Is not a calcareous fen	

C 5.0. Forested Wetlands		
Does the wetland have an area of fo	rest rooted within its boundary that meets at least one of	
the following three criteria? (Contining question H 1.1)	ue only if you have identified that a forested class is present	
— The wetland is within the 100	year floodplain of a river or stream	
- Aspen (Populus tremuloides) re	presents at least 20% of the total cover of woody species	
	ven in wetlands smaller than 2.5 ac) that are "mature" or	
	efinitions for these priority habitats developed by WDFW	
(see definitions in question H3.1		
	SC 5.1 No = Not a forested wetland with special characteristics	
5.1. Does the wetland have a forest canopy	where more than 50% of the tree species (by cover) are slow	Cat. I
growing native trees (see Table 7)?	Yes = Category I No – Go to SC 5.2	
5.2. Does the wetland have areas where as of woody species?	pen ( <i>Populus tremuloides</i> ) represents at least 20% of the total cover Yes = Category   No – Go to SC 5.3	Cat. I
5.3. Does the wetland have at least ¼ acre w	ith a forest canopy where more than 50% of the tree species (by le 7)? Yes = Category II No – Go to SC 5.4	Cat. II
cover) are fast growing species (see Tal	nd within the 100 year floodplain of a river or stream?	
Yes = Cat	egory II No = Not a forested wetland with special characteristics	Cat. II
Category of wetland based on Special Charac	teristics	
Choose the highest rating if wetland falls into		MA

# Appendix B: WDFW Priority Habitats in Eastern Washington

Priority habitats listed by WDFW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp. http://wdfw.wa.gov/publications/00165/wdfw00165.pdf or access the list from here: http://wdfw.wa.gov/conservation/phs/list/)

Count how many of the following priority habitats are within 330 ft (100 m) of the wetland: NOTE: This question is independent of the land use between the wetland and the priority habitat.

- Aspen Stands: Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- Biodiversity Areas and Corridors: Areas of habitat that are relatively important to various species of native fish and wildlife (full descriptions in WDFW PHS report).
- Old-growth/Mature forests: Old-growth east of Cascade crest Stands are highly variable in tree species composition and structural characteristics due to the influence of fire, climate, and soils. In general, stands will be >150 years of age, with 10 trees/ac (25 trees/ha) that are > 21 in (53 cm) dbh, and 1-3 snags/ac (2.5-7.5 snags/ha) that are > 12-14 in (30-35 cm) diameter. Downed logs may vary from abundant to absent. Canopies may be single or multi-layered. Evidence of human-caused alterations to the stand will be absent or so slight as to not affect the ecosystem's essential structures and functions. 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 oldgrowth; 80-200 years old west and 80-160 years old east of the Cascade crest.
- Oregon White Oak: Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (full descriptions in WDFW PHS report p. 158 - see web link above).
- Riparian: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.
- 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.
- Caves: A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.
- Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.
- Talus: Homogenous areas of rock rubble ranging in average size 0.5 6.5 ft (0.15 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.
- Snags and Logs: Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 12 in (30 cm)in eastern 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.
- Shrub-steppe: A nonforested vegetation type consisting of one or more layers of perennial bunchgrasses and a conspicuous but discontinuous layer of shrubs (see Eastside Steppe for sites with little or no shrub cover).
- Eastside Steppe: Nonforested vegetation type dominated by broadleaf herbaceous flora (i.e., forbs), perennial bunchgrasses, or a combination of both. Bluebunch wheatgrass (Pseudoroegneria spicata) is often the prevailing cover component along with Idaho fescue (Festuca idahoensis), Sandberg bluegrass (Poa secunda), rough fescue (F. campestris), or needlegrasses (Achnatherum spp.).
- Juniper Savannah: All juniper woodlands.

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.

Wetland Rating System for Eastern WA: 2014 Update

# RATING SUMMARY – Eastern Washington

Name of wetland (or ID #):/ Rated by Sensor	
HGM Class used for rating	
	te without the figures requested (figures can be combined).  oto/map
OVERALL WETLAND CAT	<b>EGORY</b> (based on functions or special characteristics)

## 1. Category of wetland based on FUNCTIONS

Category I -	Total score = 22-27
Category II -	Total score = 19-21
Category III -	-Total score = 16-18
Category IV	Total score = 9-15

FUNCTION		roving Quality		Hydrologic		Habitat				
			Circle	the a	ppropi	riate ro	itings			
Site Potential	H (	M)	L	Н	М	0	Н	M	L	
Landscape Potential	H (	M	L	Н	(M)	L	1	М	L	
Value	Н (	M	L	Н	M	) L (	H	М	L	TOTAL
Score Based on Ratings		6			5	-		8		19

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

8 =	H,H,M
7 =	H,H,L
7 =	H,M,M
6 =	H,M,L

9 = H,H,H

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  Circle the appropriate category
Vernal Pools	II III
Alkali	
Wetland of High Conservation Value	I
Bog and Calcareous Fens	I
Old Growth or Mature Forest – slow growing	
Aspen Forest	I
Old Growth or Mature Forest – fast growing	II
Floodplain forest	п
None of the above	

				 <i>,</i> '
Wetland	name	or	number	 _

### Maps and figures required to answer questions correctly for Eastern Washington Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes and classes of emergents	D 1.3, H 1.1, H 1.5	
Hydroperiods (including area of open water for H 1.3)	D 1.4, H 1.2, H 1.3	
Location of outlet (can be added to map of hydroperiods)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wet and (can be added to another figure	) D 2.2, D 5.2	
Map of the contributing basin	D 5.3	
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	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which wetland is found (website)	D 3.3	

#### Riverine Wetlands

Map of	To answer questions:	Figure 1
Cowardin plant classes and classes of emergents	H 1.1, H 1.5	
Hydroperiods	H 1.2, H 1.3	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wet and (can be added to another figure)	R 2.4	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of wetland vs. width of stream (can be added to another figure)	R 4.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R 3.1	
Screen capture of list of TMDLs for WRIA in which wetland is found (website)	R 3.2, R 3.3	

### Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes and classes of emergents	L1.1, L4.1, H1.1, H1.5	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (can be added to another figure)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which wetland is found (website)	L 3.3	

## Slope Wetlands

Map of:	To answer questions	Figure #
Cowardin plant classes and classes of emergents	H 1.1, H 1.5	
Hydroperiods	H 1.2, H 1.3	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (can be added to figure above)	S 4.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which wetland is found (website)	\$ 3.3	

Wetland name	or	number	<u> </u>

## **HGM Classification of Wetland in Eastern Washington**

For questions 1-4, 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 1-4 apply, and go to Question 5.

1.	of permanent open water (wit	f the following criteria? and is on the water side of the Ordinary High Water Mark of a body hout any plants on the surface) that is at least 20 ac (8 ha) in size area is deeper than 10 ft (3 m)
(	NO - go to 3	YES - The wetland class is Lake Fringe (Lacustrine Fringe)
2.		e can be very gradual), vetland in one direction (unidirectional) and usually comes from as sheetflow, or in a swale without distinct banks;
<	NO - go to 3  NOTE: Surface water does not poshallow depressions or behind hudeep).	YES – The wetland class is <b>Slope</b> nd in these type of wetlands except occasionally in very small and mmocks (depressions are usually <3 ft diameter and less than 1 foot
3.		m channel, where it gets inundated by overbank flooding from that
jarraman a	NO - go to 4 NOTE: The Riverine wetland can flooding.	YES – The wetland class is <b>Riverine</b> contain depressions that are filled with water when the river is not
4,	Is the entire wetland unit in a top surface, at some time during the y of the wetland.	ographic depression in which water ponds, or is saturated to the ear. This means that any outlet, if present, is higher than the interior
	NO – go to 5	YES - The wetland class is Depressional
5.	classes. For example, seeps at the stream within a Depressional wet WHICH OF THE HYDROLOGIC RE AREAS IN THE WETLAND UNIT (1	ficult to classify and probably contains several different HGM base of a slope may grade into a riverine floodplain, or a small land has a zone of flooding along its sides. GO BACK AND IDENTIFY GIMES DESCRIBED IN QUESTIONS 1-4 APPLY TO DIFFERENT nake a rough sketch to help you decide). Use the following table to se for the rating system if you have several HGM classes present

within the wetland unit being scored.

				- (	>
				,	_
Wetland	name	or	number		_
AACHUIIA	Hanne	OI	HMHHPCI		

**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 wetland 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
	Riverine	Riverine
Slope + D	epressional	Depressional
Slope + L	ake Fringe	Lake Fringe
•	ne riverine portion is within of depression)	Depressional
Depressiona	+ Lake Fringe	Depressional
Riverine +	Lake Fringe	Riverine

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.

9398	SENONAL WEIGHNES	in it is a second	Penny
	at the site functions to improve water q	uality	(anly ) score per
			lateral .
D 1.0. Does the site have the potential to in	prove water quality?		
D 1.1. Characteristics of surface water outflows			
Wetland has no surface water outlet		points = 5	
Wetland has an intermittently flowing ou	tlet	points = 3	
Wetland has a highly constricted perman		points = 3	72
Wetland has a permanently flowing, unco	enstricted, surface outlet	points = 1	
D 1.2. The soil 2 in below the surface (or duff la	ver) is true clay or true organic (use NRCS definition	ons of soils)	
		YES = 3 NO = 0	0
D 1.3. Characteristics of persistent vegetation (E	mergent, Scrub-shrub, and/or Forested Cowardin	n classes)	
Wetland has persistent, ungrazed, vegeta	tion for > 2/3 of area	points = 5	
Wetland has persistent, ungrazed, vegeta	tion from $^{1}/_{3}$ to $^{2}/_{3}$ of area	points = 3	_
Wetland has persistent, ungrazed vegeta	tion from $^{1}/_{10}$ to $< ^{1}/_{3}$ of area	points = 1	5
Wetland has persistent, ungrazed vegeta	tion < 1/ <sub>10</sub> of area	points = 0	
D 1.4. Characteristics of seasonal ponding or inc			
	every year. Do not count the area that is perman	ently ponded.	
Area seasonally ponded is > ½ total area		points = 3	
Area seasonally ponded is ¼ - ½ total a	rea of wetland	points = 1	
Area seasonally ponded is < 1/4 total area		points = 0	0
Total for D 1	Add the point	s in the boxes above	8
Pating of Site Potential If score is: 12-16 = H		ecord the rating on th	e first page
D 2.0. Does the landscape have the potenti	al to support the water quality function of th		
D 2.1. Does the wetland receive stormwater dis	charges?	Yes = 1 No = 0	
D 2.2. Is > 10% of the area within 150 ft of the	wetland in land uses that generate pollutants?	Yes = 1 No = 0	σ
D 2.3. Are there septic systems within 250 ft of	the wetland?	Yes = 1 No = 0	5
	ing into the wetland that are not listed in question	ons	
D 2.1- D 2.3? Source		Yes = 1 (No = 0)	O
Total for D 2	Add the point	s in the boxes above	1
	1 or 2 = M0 = L	ecord the rating on th	ne first page
			and the second of the con-
D 3.0. Is the water quality improvement pro			
D 3.1. Does the wetland discharge directly (i.e.,	within 1 mi) to a stream, river, or lake that is on t	the 303(d) list? Yes = No = 0	0
Baa taka wakandina kasina masik kasin sak	ere water quality is an issue in some aquatic reso		
eutrophic lakes, problems with nuisance		Yes = 1 No = 0	
D 3.3. Has the site been identified in a watershe	d or local plan as important for maintaining water	er quality (answer YES	
if there is a TMDL for the drainage or bas		Yes = 2 No = 0	0
Total for D3		ts in the boxes above	1
Rating of Value If score is: 2-4 = H 1=1	VI 0=L B	lecord the rating on th	e first paae
MINING 1 1 30010 13.			, , ,

THE CONTRACTOR OF THE CONTRACT		Politica Corali, Escapa
Hydrologic Functions - Indicators that t		per box)
	dura flooding and oracion?	
D 4.0. Does the site have the potential to re		
D 4.1. Characteristics of surface water outflows		
Wetland has no surface water outlet	points = 8	
Wetland has an intermittently flowing ou		)
Wetland has a highly constricted perman Wetland has a permanently flowing unco	History are arred a many	4
(If outlet is a ditch and not permanently f	owing treat wetland as "intermittently flowing")	
D 4.2. Depth of storage during wet periods: Esti	mate the height of ponding above the bottom of the outlet. For	
wetlands with no outlet, measure from th	e surface of permanent water or deepest part (if dry).	
Seasonal ponding: > 3 ft above the lowes	point in wetland or the surface of permanent ponding points = 8	
	owest point in wetland or the surface of permanent pondingpoints = 6	
The wetland is a headwater wetland	points = 4	1
Seasonal ponding: 1 ft - < 2 ft	points = 4	
Seasonal ponding: 6 in - < 1 ft	points = 2 points = 2 points = 0	0
Seasonal ponding: < 6 in or wetland has o	Add the points in the boxes above	4
Rating of Site Potential If score is: 12-16 =	n	ie jii si puye
0.5.0. Does the landscape have the potenti	al to support the hydrologic functions of the site?	
D 5.1. Does the wetland receive stormwater dis	The state of the s	
D 5.2. Is > 10% of the area within 150 ft of the		0
	n of the wetland covered with intensive human land uses?  Yes = 1 No = 0	0
Total for D 5	Add the points in the boxes above	
	H1 or 2 = M0 = L Record the rating on ti	ne first page
Rating of Lanoscape Folentian 11 Score is	1	
D 6.0. Are the hydrologic functions provide	d by the site valuable to society?	
D 6.1. The wetland is in a landscape that has flo		
	conditions around the wetland being rated. Do not add points.	
Choose the highest score if more than on		
The wetland captures surface water that	would otherwise flow down-gradient into areas where flooding has	
damaged human or natural resources (e.		
_	immediately down-gradient of wetland points = 2	
Surface flooding problems are in a s		<b>D</b>
	e wetland is so constrained by human or natural conditions that the	
water stored by the wetland cannot reac	h areas that flood.	
Explain why	points = 0	1
There are no problems with flooding dow	nstream of the wetland points = 0	
	ant for flood storage or flood conveyance in a regional flood control	c
plan?	Yes = 2 No = 0	,
Total for D 6	Add the points in the boxes above	
Rating of Value If score is: 2-4 = H 1 = N	Record the rating on to	he first page

These questions apply to wetlands of all HGM classes.	(only 1 score per
HABITAT FUNCTIONS - Indicators that site functions to provide important habitat	box)
H 1.0. Does the wetland have the potential to provide habitat for many species?	
H 1.1. Structure of the plant community:  Check the Cowardin vegetation classes present and categories of emergent plants. Size threshold for each category is >= ½ ac or >= 10% of the wetland if wetland is < 2.5 ac.  Aquatic bed  Emergent plants 0-12 in (0-30 cm) high are the highest layer and have > 30% cover  Emergent plants >12-40 in (>30-100 cm) high are the highest layer with >30% cover  Emergent plants > 40 in (> 100 cm) high are the highest layer with >30% cover  Scrub-shrub (areas where shrubs have >30% cover)  Forested (areas where trees have >30% cover)  1 check: points = 2  2 checks: points = 0	/
H 1.2. Is one of the vegetation types Aquatic Bed?  Yes = 1 10=0	0
H 1.3. Surface water  H 1.3.1. Does the wetland have areas of open water (without emergent or shrub plants) over at least ½ ac OR  10% of its area during the March to early June OR in August to the end of September? Answer YFS  for Lake Fringe wetlands.  Yes = 3 points & go to H 1.4 No = go to H 1.3.2  H 1.3.2. Does the wetland have an intermittent or permanent, and unvegetated stream within its boundaries, or along one side, over at least ½ ac or 10% of its area? Answer yes only if H 1.3.1 is No.  Yes = 3 No = 0	3
H 1.4. 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. You do not have to name the species.  Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Russian olive, Phragmites, Canadian thistle, yellow-flag iris, and saltcedar (Tamarisk)  # of species Scoring: > 9 species: points = 2	
4-9 species: points = 1 < 4 species: points = 0	1
H 1.5. Interspersion of habitats  Decide from the diagrams below whether interspersion among types of plant structures (described in H 1.1), and unvegetated areas (open water or mudflats) is high, moderate, low, or none.  Use map of Cowardin and emergent plant classes prepared for questions H 1.1 and map of open water from H 1.3. If you have four or more plant classes or three classes and open water, the rating is always high.	Figure
None = 0 points Low = 1 point Moderate = 2 points	
All three diagrams in this row are High = 3 points	\
Pinarian braided channels with 2 classes	1

Vetland name or number	
11.6. Special habitat features	
Check the habitat features that are present in the wetland. The number of checks is the number of points.	
Loose rocks larger than 4 in OR large downed, woody debris (> 4 in diameter) within the area of surface	ce
ponding or in stream.	
Cattails or bulrushes are present within the wetland.	1
Standing snags (diameter at the bottom > 4 in) in the wetland or within 30 m (100 ft) of the edge.	
Emergent or shrub vegetation in areas that are permanently inundated/ponded.	
Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 45 degree	1
slope) OR signs of recent beaver activity	1
Invasive species cover less than 20% in each stratum of vegetation (canopy, sub-canopy, shrubs,	/
herbaceous, moss/ground cover)	
Total for H 1 Add the points in the boxes above	9 7
Rating of Site Potential If score is: 15-18 = H 7-14 = M 0-6 = L Record the rating on the first page	ę
H 2.0. Does the landscape have the potential to support habitat functions of the site?	
H 2.1. Accessible habitat (only area of habitat abutting wetland). If total accessible habitat is:	
Calculate: 36% undisturbed habitat 18 + [(% moderate and low intensity land uses)/2] 9 = 45 %	6
> 1/3 (33.3%) of 1 km Polygon points =	₽
20-33% of 1km Polygon points = 2	2
10-19% of 1km Polygon points = 1	1
<10% of 1km Polygon points = 0	
H 2.2. Undisturbed habitat in 1 km Polygon around wetland.	
Calculate: 50% undisturbed habitat $\frac{1}{1}$ + [(% moderate and low intensity land uses)/2] $\frac{2U}{2} = \frac{7U}{9}$	4
Calculate. 30 % distallated flabituat -77 . [[7] modelate and last internal of the calculated flabituation of the calculated	
70	
	1
Undisturbed habitat 10 - 50% and > 3 patches points = 1	1 -
Undisturbed habitat < 10% of Polygon points = 0	-
H 2.3. Land use intensity in 1 km Polygon:	
> 50% of Polygon is high intensity land use points = (-2	
Does not meet criterion above points = 1	ע
H 2.4. The wetland is in an area where annual rainfall is less than 12 in, and its water regime is not influenced by	
irrigation practices, dams, or water control structures. Generally, this means outside boundaries of	_ 0
reclamation areas, irrigation districts, or reservoirs  Yes = No =	
Total for H 2 Add the points in the boxes above	e 6
Rating of Landscape Potential If score is: 4-9 = H 1-3 = M < 1 = L Record the rating on the first page	е
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 the highest score	
that applies to the wetland being rated	,
Site meets ANY of the following criteria: points = 2	Ľ.
— It has 3 or more priority habitats within 100 m (see Appendix B)	
It provides habitat for Threatened or Endangered species (any plant or animal on state or federal lists)	1
— It is mapped as a location for an individual WDFW 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 within 100 m (see Appendix B) points = 3	1
Site does not meet any of the criteria above points = 0	J
Rating of Value If score is: 2 = H 1 = M 0 = L Record the rating on the first page	

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

Wetland	name or number	

### **CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS**

Please determine if the wetland meets the attributes described below and circle the appropriate category. NOTE: A wetland may meet the criteria for more than one set of special characteristics. Record all those that apply. NOTE: All wetlands should also be characterized based on their functions.

Wetland Type		
	Circle the category when the appropriate criteria are met.	
SC 1.0. Vernal pools	it was at least time of the following gritoria?	
	es it meet at least <b>two</b> of the following criteria?	
-	snowmelt from a small contributing basin and has no groundwater	17
input.	only in the spring; the summer vegetation is typically upland	
— wetland plants are typically present	te, wetland plants, the wetland is probably NOT a vernal pool.	
	ft (30 cm)deep) and is underlain by an impermeable layer such as	
basalt or clay.	1 (Can chifueeb) and is underlain by an impermediate toyer soon as	
Surface water is present for less that	120 days during the wet season.	
Surface water is present for less than	Yes – Go to SC (1 No = Not a vernal pool	
SC 1.1. Is the vernal pool relatively undisturbed		
Yes	Go to SC 1.2 No = Not a vernal pool with special characteristics	
	are at least 3 separate aquatic resources within 0.5 mi (other  Yes = Category II No = Category III	Cat. II
wetlands, rivers, lakes etc.)?	tez = category ii No = category iii	Cat. III
SC 2.0. Alkali wetlands		
Does the wetland meet one of the fo	lowing criteria?	
— The wetland has a conductivity > 3		
	tween 2.0 and 3.0 mS, and more than 50% of the plant cover in the	
wetland can be classified as "alkal	i" species (see Table 4 for list of plants found in alkali systems).	
— If the wetland is dry at the time of salt.	your field visit, the central part of the area is covered with a layer of	
OR does the wetland unit meet two o	the following three sub-criteria?	
Salt encrustations around more th	an 75% of the edge of the wetland	
More than ¾ of the plant cover co		
	have a high pH, but please note that some freshwater wetlands	C-A I
may also have a high pH. Thus, pH	alone is not a good indicator of alkali wetlands.	Cat. I
	Yes = Category   No= Not an alkali wetland	
SC 3.0. Wetlands of High Conservation Val		
	urces updated their website to include the list of Wetlands of High	
Conservation Value?	Yes - Go to SC 3.2 No - Go to SC 3.3	
SC 3.2. Is the wetland listed on the WDNR data		C-4 1
	Yes = Category I No = Not a WHCV	Cat. I
SC 3.3. Is the wetland in a Section/Township/Ra		
http://www1.dnr.wa.gov/nhp/refdesk/	datasearch/wnhpwetlands.pdf	
	Yes - Contact WNHP/WDNR and go to SC 3.4 No = Not a WHO	
con a liss Within idealified the wetland within	the S/T/R as a Wetland of High Conservation Value and it is listed	
on their website?	Yes = Category I No =Not a WHCV	

		r
ie wetland based on its function	ns.	
		1
or more of the first 32 in of the	soil profile? See Appendix C for a field key to	_
1.	Yes - Go to SC 4.3 No - Go to SC 4.2	
tland have organic soils, either p	peats or mucks, that are less than 16 in deep over	er
		_
	Yes - Go to SC 4.3 No = Is not a bog for rating	2
land have more than 70% cover	r of mosses at ground level AND at least 30% of	1
-4:	Yes = Category I bog No - Go to SC 4.4	
	ne understory, you may substitute that criterion	
		1
		S Can I
		Cat. I
		. 1
e 6 comprise at least 20% of the		
-	occur on the soil surface or plant stems	Cat. i
te tte oct	the wetland based on its function the wetland based on its function that have organic soil horizons or more of the first 32 in of the stand have organic soils, either perhardpan such as clay or volcanic than the have more than 70% cover that sof species in Table 5? about the extent of mosses in the water that seeps into a hole dupole 5 are present, the wetland is cks forested (> 30% cover) with such that is seeps into a hole dupole 5 are present, the wetland is cks forested (> 30% cover) with such that is seeps into a hole dupole 5 are present, the wetland is cks forested (> 30% cover) with such that is a cover that is at least 20% of the least 10% of the least	art of the wetland unit) meet both the criteria for soils and vegetation in bogs or by below to identify if the wetland is a bog or calcareous fen. If you answer yes the wetland based on its functions.  Itland have organic soil horizons (i.e., layers of organic soil), either peats or or more of the first 32 in of the soil profile? See Appendix C for a field key to Yes — Go to SC 4.3 No — Go to SC 4.2 Itland have organic soils, either peats or mucks, that are less than 16 in deep over the hardpan such as clay or volcanic ash, or that are floating on top of a lake or Yes — Go to SC 4.3 No — Is not a bog for rating than have more than 70% cover of mosses at ground level AND at least 30% of the sof species in Table 5?  Yes — Category I bog No — Go to SC 4.4 about the extent of mosses in the understory, you may substitute that criterion water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 ole 5 are present, the wetland is a bog.  cks forested (> 30% cover) with subalpine fir, western red cedar, western waking aspen, Engelmann spruce, or western white pine, AND any of the species listed in Table 5 provide more than 30% of the cover under the canopy?  Yes = Category I bog No — Go to SC 4.5 are least 20% of the total plant cover within an area of peats and Yes = Is a Calcareous Fen for purpose of rating No — Go to SC 4.6 are least 10% of the total plant cover in an area of peats and mucks.

SC 5.0. Forested Wetlands	4-7-4-3
Does the wetland have an area of forest rooted within its boundary that meets at least one of	
the following three criteria? (Continue only if you have identified that a forested class is present in question H 1.1)	
— The wetland is within the 100 year floodplain of a river or stream	
— Aspen (Populus tremuloides) represents at least 20% of the total cover of woody species	
— There is at least ¼ ac of trees (even in wetlands smaller than 2.5 ac) that are "mature" or	
"old-growth" according to the definitions for these priority habitats developed by WDFW	
(see definitions in question H3.1)	
Yes – Go to SC 5.1 No = Not a forested wetland with special characteristics	
SC 5.1. Does the wetland have a forest canopy where more than 50% of the tree species (by cover) are slow	Cat. I
growing native trees (see Table 7)? Yes = Category i No – Go to SC 5.2	
SC 5.2. Does the wetland have areas where aspen (Populus tremuloides) represents at least 20% of the total cover	Cat. I
of woody species? Yes = Category I No Go to SC 5.3	
SC 5.3. Does the wetland have at least ¼ acre with a forest canopy where more than 50% of the tree species (by cover) are fast growing species (see Table 7)?  Yes = Category II No – Go to SC 5.4	Cat. II
SC 5.4. Is the forested component of the wetland within the 100 year floodplain of a river or stream?	
Yes = Category II No = Not a forested wetland with special characteristics	Cat. II
Category of wetland based on Special Characteristics	
Category of wetland based on Special Characteristics  Choose the highest rating if wetland falls into several categories	NA

## Appendix B: WDFW Priority Habitats in Eastern Washington

Priority habitats listed by WDFW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp. <a href="http://wdfw.wa.gov/publications/00165/wdfw00165.pdf">http://wdfw.wa.gov/publications/00165/wdfw00165.pdf</a> or access the list from here: <a href="http://wdfw.wa.gov/conservation/phs/list/">http://wdfw.wa.gov/conservation/phs/list/</a>)

Count how many of the following priority habitats are within 330 ft (100 m) of the wetland: **NOTE:** This question is independent of the land use between the wetland and the priority habitat.

- Aspen Stands: Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- Biodiversity Areas and Corridors: Areas of habitat that are relatively important to various species of native fish and wildlife (full descriptions in WDFW PHS report).
- Old-growth/Mature forests: Old-growth east of Cascade crest Stands are highly variable in tree species composition and structural characteristics due to the influence of fire, climate, and soils. In general, stands will be >150 years of age, with 10 trees/ac (25 trees/ha) that are > 21 in (53 cm) dbh, and 1-3 snags/ac (2.5-7.5 snags/ha) that are > 12-14 in (30-35 cm) diameter. Downed logs may vary from abundant to absent. Canopies may be single or multi-layered. Evidence of human-caused alterations to the stand will be absent or so slight as to not affect the ecosystem's essential structures and functions. 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 and 80-160 years old east of the Cascade crest.
- Oregon White Oak: Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (full descriptions in WDFW PHS report p. 158 see web link above).
- Riparian: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.
- 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.
- Caves: A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.
- Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.
- Talus: Homogenous areas of rock rubble ranging in average size 0.5 6.5 ft (0.15 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.
- Snags and Logs: Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 12 in (30 cm)in eastern 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.
- Shrub-steppe: A nonforested vegetation type consisting of one or more layers of perennial bunchgrasses and a conspicuous but discontinuous layer of shrubs (see Eastside Steppe for sites with little or no shrub cover).
- Eastside Steppe: Nonforested vegetation type dominated by broadleaf herbaceous flora (i.e., forbs), perennial bunchgrasses, or a combination of both. Bluebunch wheatgrass (*Pseudoroegneria spicata*) is often the prevailing cover component along with Idaho fescue (*Festuca idahoensis*), Sandberg bluegrass (*Poa secunda*), rough fescue (*F. campestris*), or needlegrasses (*Achnatherum* spp.).
- Juniper Savannah: All juniper woodlands.

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.

Wetland Rating System for Eastern WA: 2014 Update Effective January 1, 2015

