WETLAND RATING FORM – EASTERN WASHINGTON (V2)
Spring Creek - Chinook Properties Site – Wetland Unit: Spring Creek

Wetland name:	Spring Creek
Date of visit:	November 9 & 10, 2007
Rater:	Philip Small
S/T/R:	S08 T12N R19E
S/T/R on NHW list?	No
Map of Wetland	Figure 2
Estimated Size (acres)	4.0

SUMMARY OF RATING

Category (from scoring):	Spring Creek
Water Quality score:	12
Hydrologic score:	14
Habitat score:	19
TOTAL score:	45 (III)

Category (from special characteristics):	Spring Creek
Fed. Listed T/E habitat:	no
St. Listed T/E habitat:	no
WDFW priority spp individuals:	no
Local significance:	no
Vernal Pool?	no
Alkali wetlands?	no
Natural Heritage wetlands?	no
Bogs?	no
Forested wetlands?	no

Final Category (highest from above):

Final Category (highest from above):	Spring Creek
	III

Summary of basic information about the wetland unit

Type and Class	Spring Creek
Wetland Type:	no type
Wetland Class:	Riverine

Hydrogeomorphic Classification of Vegetated Wetlands for Eastern Washington

Question	Spring Creek	Geomorphic Class if YES
Wetland has ≥20 ac of open water and ≥30% is deeper than 3m.	no	Lake-fringe
Wetland is on a slope; flow is unidirectional (usually from seeps), and leaves wetland without being impounded (dep <3'diam, <1'deep).	no	Slope
Wetland is in a riparian channel and receives overflow from river or stream at least once in 10 years.	Yes	Riverine
Wetland is in a depression, not in regular overflow areas; outlet is higher than interior of wetland.	no	Depressional
Wetland has several HGM classes, and second class ≥10% of area: Slope + Riv = Riverine Slope + Dep = Depressional Slope + Lake Fringe = Lake fringe Dep + Riv = Depressional Dep + Lake Fringe = Depressional Generally confusing: Depressional	no	

Water Quality Potential Question (Riverine)	Spring Creek
R1.0 Does wetland have potential to improve water quality? R1.1 Areas of surface depressions within riverine unit that can trap sediments during a flooding event Depressions on >1/3 of wetland (6) Depressions on >1/10 of wetland (3) Depressions on <1/10 of wetland (1) No depressions (0)	1
R1.2 Characteristics of vegetation cover Forest or shrub > 2/3 of wetland (10) Forest or shrub 1/3–2/3 of wetland (5) Ungrazed, herbaceous plants > 2/3 of wetland (5) Ungrazed herbaceous plants 1/3–2/3 of wetland (2) Forest, shrub, and ungrazed herbaceous < 1/3 of wetland points (0)	5
Total score for Water Quality Potential	**06**

Water Quality Opportunity Question (Riverine)	Spring Creek
R2.0 Does wetland have opportunity to improve water quality?	Yes
Grazing in wetland or within 150 ft?	√
Wetland intercepts groundwater within Reclamation area?	√
Untreated stormwater flow into wetland?	√
Tilled fields or orchards within 150 ft?	√
Discharges from agricultural, logging or residential areas?	√
Residential or urban areas within 150 ft?	√
System that floods the wetland has a basin where human activities have increased levels of sediment, toxic compounds or nutrients above water quality standards?	
Other?	√
Total Water Quality Functions (R1 x 2 multiplier if Yes, x 1 if No)	**12**

Hydrologic Function <u>Potential</u> Question (Riverine)	Spring Creek
R3.0 Does wetland have <u>potential</u> to reduce flooding and stream erosion? R3.1 Amount of overbank storage the wetland provides; ratio of wetland width/stream width: Ratio is 2 or more (10) Ratio is 1-2 (8) Ratio is ½ - 1 (4) Ratio is 1/4 - ½ (2) Ratio is < 1/4 (1)	1
R3.2 Characteristics of vegetation that slow down water velocities during floods: Forest or shrub > 2/3 of wetland (6) Forest or shrub >1/3 OR herbaceous plants >2/3 of wetland (4) Forest or shrub >1/10 OR herbaceous plants > 1/3 of wetland (2) None of the above (0)	6
Total score for Hydrologic Function Potential Question	07

Hydrologic Function <u>Opportunity</u> Question (Riverine)	Spring Creek
R4.0 Does wetland have <u>opportunity</u> to reduce flooding and erosion? There are roads, buildings, bridges, farms (etc) downstream that can be damaged by flooding. There are natural resources downstream (e.g. salmon redds) than can be damaged by flooding. Other_____	Yes
Total Score: Hydrologic Functions (R3 x 2 multiplier if Yes, x1 if No)	**14**

Habitat Functions (Potential)	Spring Creek
H1.1 Does the wetland have the potential to provide habitat for many species? *Size threshold for each class or height category is 1/4 acre or more than 10% of the area if wetland rating unit is < 2.5 acres.* Aquatic bed Emergent plants 0-12" are highest layer and > 30% cover Emergent plants 12–40" are highest layer with >30% cover Emergent plants > 40" are highest layer with >30% cover Scrub/shrub (areas where shrubs have >30% cover) Forested (areas where trees have >30% cover) **4-6 types (3); 3 types (2); 2 types (1); 1 type (0)**	 √ √ **1**
H1.2 Is one of the vegetation types "aquatic bed"? Yes (1)	0
H1.3.1 Does the unit have areas of "open" water (no plants) over at least 1/4 ac. or 10% of its area during the spring (March – early June) OR in early fall (August – end of September)? Yes = (3) and **go to H 1.4** ; No (0) and **go to H 1.3.2**	3
H 1.3.2 Does the unit have an intermittent or permanent stream within its boundaries, or along one side, over at least ¼ acre or 10% of its area, AND that has an unvegetated bottom? Yes (3); No (0)	na
H 1.4. Richness of Plant Species: Count the number of plant species that cover at least 10 ft2. Do not include Eurasean Milfoil, reed canarygrass, purple loosestrife, Russian Olive, Phragmites ,Canadian Thistle, Yellow-flag Iris, and Salt Cedar (Tamarisk). 9 species (2); 4-9 species (1); < 4 species (0)	1
H 1.5. Interspersion of habitats: None = (0); Low (1); Moderate (2); High (3)	1
H 1.6. Special Habitat Features: ¬ Loose rocks larger than 4" or large (>4: d), downed, woody debris in the area of surface ponding or in stream. ¬ Cattails or bulrushes are present within the unit. ¬ Standing snags (d. at base > 4") in the wetland or within 30 m of 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 ¬ Invasive species cover less than 20% in each stratum of vegetation *(canopy, sub-canopy, shrubs, herbaceous, moss/ground cover)* *Maximum score possible = 6*	 √ √ √ √ 4
TOTAL score: Potential to provide habitat:	**10**

Habitat Functions (Opportunity) **H2.0 Does the wetland have the opportunity to provide habitat for many species?**	Spring Creek
H2.1 Buffers ¬ **330ft** of rel. undist. veg. or rocky, or open water >**95%** of edge (5) ¬ **330ft** of rel. undist. veg. or rocky, or open water **>50%** of edge (4) ¬ **170ft** of rel. undist. veg. or rocky, or open water **>95%** of edge (4) ¬ **330ft** of rel. undist. veg. or rocky, or open water **>25%** of edge (3) ¬ **170ft** of rel. undist. veg. or rocky, or open water **>50%** of edge (3) If buffer does not meet any of the criteria above ¬ No pavement (exc. trails) or bldgs. within 80ft of wetland > 95% of edge; light to moderate grazing or lawn (2) ¬ No pavement or bldgs. within 170ft of edge for >50% circumference; light to moderate grazing or lawns (2) ¬ Heavy grazing in buffer. (1) ¬ Vegetated buffers are <6.6ft wide for > 95% of the edge (1) ¬ Buffer does not meet any of the criteria above (1)	1
H 2.2.1 Is the wetland part of a rel. undisturbed and unbroken, > 30 ft wide, vegetated corridor at least ¼ mile long with surface water or flowing water throughout most of the year (> 9 months/yr)? YES = (4) (**go to H 2.3**) NO (0) (**go to H 2.2.2**)	4
H 2.2.2 Is the wetland part of a relatively undisturbed and unbroken, > 30 ft wide, vegetated corridor, at least ¼ mile long with water flowing seasonally, **OR** a lake-fringe wetland without a "wet" corridor, **OR** a riverine wetland without a surface channel connecting to the stream? YES =(2) (**go to H 2.3**) NO (0) (**go to H 2.2.3**)	NA
H 2.2.3 Is the wetland within a ½ mile of any permanent stream, seasonal stream, or lake (*do not include man-made ditches*)?YES (1) ; NO (0)	NA
H 2.3 Near or adjacent to other priority habitats listed by WDFW Which of the following priority habitats are within 330ft of the wetland unit? ¬ **Riparian**: The area is adjacent to aquatic systems with flowing water ¬ **Aspen Stands:** Pure or mixed stands of aspen greater than 2 acres. ¬ **Cliffs:** Greater than 25 ft high and occurring below 5000 ft. ¬ **Old-growth forests:**) Stands will be >150 years of age, with 10 trees/acre that are > 21 in dbh, and 1 - 3 snags/acre > 12-14 in diameter. ¬ **Mature forests:** Stands with average diameters exceeding 21 in dbh; crown cover may be less that 100%; 80 - 160 years old ¬ **Prairies and Steppe:** Relatively undisturbed areas (as indicated by dominance of native plants) where grasses and/or forbs form the natural climax plant community. ¬ **Shrub-steppe:** Tracts of land consisting of plant communities with one or more layers of perennial grasses and a conspicuous but discontinuous layer of shrubs. ¬ **Talus:** Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft, composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs. ¬ **Caves:** A naturally occurring cavity, recess, void, or system of interconnected passages ¬ **Oregon white Oak:** Woodlands Stands of pure oak or oak/conifer associations where canopy coverage of the oak component of the stand is 25%. ¬ **Urban Natural Open Space**: A priority species resides within or is adjacent to the open space and uses it for breeding and/or regular feeding; and/or the open space functions as a corridor connecting other *priority habitats*, especially those that would	√

Habitat Functions (Opportunity) **H2.0 Does the wetland have the opportunity to provide habitat for many species?**	Spring Creek
otherwise be isolated; and/or the open space is an isolated remnant of natural habitat larger than 4 ha (10 acres) and is surrounded by urban development.	
If wetland has two or more PH (4); one PH (2); No PH (0) ***(NOTE: We only credit for a YES answer; not "possible")***	2
H 2.4 Landscape ¬ The wetland unit is in an area where annual rainfall is less than 12 inches, and its water regime is not influenced by irrigation practices, dams, or water control structures. (5) ¬ There are at least 3 other wetlands within ½ mile, and the connections between them are relatively undisturbed (light grazing or open water along a quiet lake shore OK; Connections should NOT be bisected by paved roads, fill, fields, heavy boat traffic or other development) (5) ¬ There are at least 3 other wetlands within ½ mile, BUT the connections between them are disturbed. (2) ¬ There is at least 1 wetland within ½ mile (1) ¬ Does not meet any of the four criteria above. (0)	2
Habitat Functions Opportunity Total Points	**09**

Reduced Habitat Functions	Spring Creek
H3.0 Do the areas of open water in the wetland unit have a resident population of carp? YES =(-5); NO (0)	0
TOTAL Habitat Functions Score (potential + opportunity)	19

Categorization based in Special Characteristics	Spring Creek
SC 5.0 Forested Wetlands: Does the wetland unit have an area of forest rooted within its boundary that meet **at least one** of the following three criteria? ¬ The wetland is within the "100 year" floodplain of a river or stream ¬ Aspen (*Populus tremuloides*) are a dominant or co-dominant of the woody" vegetation. (*Dominant = at least 50% of woody species, Co-dominant = at least 20% of woody species*) ¬ There is at least ¼ acre of trees that are "mature" or "old-growth" according to the definitions for these priority habitats developed by WDFW YES = **go to SC 5.1**; NO – *not a system with special characteristics*	no
SC 5.1 Does the wetland unit have a forest canopy where more than 50% of the tree species (by cover) are slow growing native trees (western red cedar, Alaska yellow cedar; pine spp. mostly "white" pine, western hemlock, Englemann spruce.) YES: Cat. I; NO: **go to SC 5.2**	not applicable
SC 5.2 Does the unit have areas where aspen (*Populus tremuloides*) are a dominant or co-dominant species? YES: Cat. I; NO: **go to SC 5.3**	not applicable
SC 5.3 Does the wetland unit have areas with a forest canopy where more than 50% of the tree species (by cover) are fast growing species (Alders – red and thin-leaf; Cottonwoods – narrow-leaf and black; Willows - peach-leaf, Sitka, Pacific; Aspen, Water Birch). YES: Cat II; NO: **go to SC 5.5**	not applicable
SC 5.5 Is the forested component of the wetland within the "100 year floodplain" of a river or stream? YES: Cat. II	not applicable