ATTACHMENTS 3- ECOS USA Wetland Analysis: Required maps, tables, and figures prepared online.

- **WETLAND BOUNDARY AND 110FT CRITICAL AREA WETLAND BUFFERS MAP.**
- **Eastern WA. Wetland Rating.**
- **Wetland Determination Data Forms.**
- **Cowardin plant classes and classes of Emergents.**
- **Hydroperiods and Climate Maps. Http://www.weather.gov/otx and www.weather.gov/wrh/climate?wfo=ot.**
- **USFWS NWI 4K Map showing Boundary of Area within 150ft of the wetland.**
- **EXCEL TABLE WITH GPS COORDINATES.**
- **USFWS NWI 1 KM MAP.**
- ~~**USFWS NWI "WETLANDS FEATURE" TABLES.**~~
- **WDFW Priority Habitat Map and Report.**
- **Water Quality CWA TMDL 303D Map "WATER QUALITY ATLAS" OF SITE AND SUBBASIN.**
- **USDA WEB SOIL SURVEY MAP "WEB SOIL SURVEY".**
- **WA DNR "Wetlands of High Conservation Value Map.**
- ~~**WA DNR HYDROLAYER WATER TYPE FEATURES FOR SITE.**~~
- **Cowardin "Wetland and Deepwater Habitats Classification".**
- DNR Watertype Map

Wetland name or number WA-1 Drumheller Springs Park/Conservation Area "DRUMHELLER SPRINGS CREEK Type N Waterbody, Spokane WA.

RATING SUMMARY – Eastern Washington

Parcel # 25014.4609 - 1630 W. EUCLID Spokane, WA 99205

Name of wetland (or ID #): DRUMHELLER SPRINGS Creek Date of site visit: 5/15 & 6/03/2025

Rated by S. Collins Trained by Ecology? √ Yes ___ No Date of training 11/2022

HGM Class used for rating Riverine, R4RB1 Wetland has multiple HGM classes? √ Y ___N

NOTE: Form is not complete without the figures requested (*figures can be combined*).

Source of base aerial photo/map USDA NAIP APFO GIS Server Online 06/06/2025

Please see Attachments 3 of Certified Wetland Report.

OVERALL WETLAND CATEGORY I (based on functions √ or special characteristics___)

1. Category of wetland based on FUNCTIONS

___√___ **Category I** – Total score = 22-27 250ft Wetland Buffer

_____ **Category II** – Total score = 19-21 Requirement as per

_____ **Category III** – Total score = 16-18 Table 17.E.070.110.3

_____ **Category IV** – Total score = 9-15 City of Spokane WA.

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
	Circle the appropriate ratings			
Site Potential	H M L	H M L	H M L	
Landscape Potential	H M L	H M L	H M L	
Value	H M L	H M L	H M L	TOTAL
Score Based on Ratings	8	9	7	24

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	

Wetland name or number WW1 Drumheller Springs Park / Conservation Area
" DRUMHELLER SPRINGS CREEK. R4 RB1

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

ATT3

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 wetland (*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)	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)	S 3.3	

SGH
ECOS USA
6/06/2025

Wetland name or number WN-1 RHRB1 DRUMHELLER SPRINGS CREEK + PARK + CONSERVATION AREA Parcel 25014.4609

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. Does the entire unit **meet both** of the following criteria?
   ___The vegetated part of the wetland is on the water side of the Ordinary High Water Mark of a body of permanent open water (without any plants on the surface) that is at least 20 ac (8 ha) in size
   ___At least 30% of the open water 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 **meet all** of the following criteria?
   ___The wetland is on a slope (*slope can be very gradual*),
   ___The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks;
   ___The water leaves the wetland **without being impounded.**

   NO - go to 3 YES – The wetland class is **Slope**
   NOTE: Surface water does not pond in these type of wetlands except occasionally in very small and shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 foot deep).

3. Does the entire wetland unit **meet all** of the following criteria?
   ✓ The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river;
   ✓ The overbank flooding occurs at least once every 10 years. Spokane River @ Mernch Dr.
   This Intermittent Creek, has a stormwatergrate and is routed underground stormwater
   NO - go to 4 City of Spokane Public Works Dept. ✓ YES – The wetland class is **Riverine**
   NOTE: The Riverine wetland can contain depressions that are ~~filled with~~ water when the river is not flooding.

4. Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the surface, at some time during the year. *This means that any outlet, if present, is higher than the interior of the wetland.*

   NO – go to 5 YES – The wetland class is **Depressional**

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.

J.S. Gallie
ECOS USA 6/06/2025

Wetland name or number_____

RIVERINE WETLANDS

Hydrologic Functions - Indicators that site functions to reduce flooding and stream erosion		Points (only 1 score per box)
R 4.0. Does the site have the potential to reduce flooding and erosion?		
R 4.1. Characteristics of the overbank storage the wetland provides: *Estimate the average width of the wetland perpendicular to the direction of the flow and the width of the stream or river channel (distance between banks). Calculate the ratio: (average width of wetland)/(average width of stream between banks).* 2ft : 150'/2'		
If the ratio is more than 2	points = 10	10
If the ratio is 1-2	points = 8	
If the ratio is ½-<1	points = 4	
If the ratio is ¼-< ½	points = 2	
If the ratio is < ¼	points = 1	
R 4.2. Characteristics of plants that slow down water velocities during floods: *Treat large woody debris as forest or shrub. Choose the points appropriate for the best description (polygons need to have > 90% cover at person height. These are NOT Cowardin classes).*		
✓ Forest or shrub for more than $^2/_3$ the area of the wetland	✓ points = 6	6
Forest or shrub for $>^1/_3$ area OR emergent plants $>^2/_3$ area	points = 4	
Forest or shrub for $>^1/_{10}$ area OR emergent plants $>^1/_3$ area	points = 2	
Plants do not meet above criteria	points = 0	
Total for R 5	Add the points in the boxes above	16

Rating of Site Potential If score is: ✓ **12-16 = H** ___ **6-11 = M** ___ **0-5 = L** *Record the rating on the first page*

R 5.0. Does the landscape have the potential to support the hydrologic functions of the site?		
R 5.1. Is the stream or river adjacent to the wetland downcut? talus basalt cliffs, But Habitat Caves, >20-25ft high	Yes = 0 No = 1	0
R 5.2. Does the up-gradient watershed include a UGA or incorporated area? City of Spokane WA	Yes = 1 No = 0	1
R 5.3. Is the up-gradient stream or river controlled by dams?	Yes = 0 No = 1	1
Total for R 5	Add the points in the boxes above	2

Rating of Landscape Potential If score is: ___ **3 = H** ✓ **1 or 2 = M** ___ **0 = L** *Record the rating on the first page*

R 6.0. Are the hydrologic functions provided by the site valuable to society?		
R 6.1. Distance to the nearest areas downstream that have flooding problems? *Choose the description that best fits the site.*		
The sub-basin immediately down-gradient of site has surface flooding problems that result in damage to human or natural resources Spokane River & Menaeh Dr. City of Spokane	points = 2	2
Surface flooding problems are in a basin farther down-gradient Stormwater Retention Pond Failure Flooding 2024?	points = 1	
No flooding problems anywhere downstream	points = 0	
R 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan?	Yes = 2 No = 0	0
Total for R 6	Add the points in the boxes above	2

Rating of Value If score is: ✓ **2-4 = H** ___ **1 = M** ___ **0 = L** *Record the rating on the first page*

Wetland name or number WW-1 DRUMHELLER SPRING PARK / CONSERVATION AREA, DRUMHELLER SPRINGS CREEK TYPE N",

RIVERINE WETLANDS

Water Quality Functions - Indicators that the site functions to improve water quality

		Points (only 1 score per box)
R 1.0. Does the site have the potential to improve water quality?		
R 1.1. Area of surface depressions within the Riverine wetland that can trap sediments during a flooding event:		
Depressions cover > 1/3 area of wetland	points = 6	
Depressions cover > 1/10 area of wetland	points = 3	3
Depressions present but cover < 1/10 area of wetland	points = 1	
No depressions present	points = 0	
R 1.2. Structure of plants in the wetland (areas with >90% cover at person height; **not** Cowardin classes):		
✓ Forest or shrub > 2/3 the area of the wetland	points = 10	
Forest or shrub 1/3 – 2/3 area of the wetland	points = 5	10
Ungrazed, herbaceous plants > 2/3 area of wetland	points = 5	
Ungrazed herbaceous plants 1/3 – 2/3 area of wetland	points = 2	
Forest, shrub, and ungrazed herbaceous < 1/3 area of wetland	points = 0	
Total for R 1	Add the points in the boxes above	13

Rating of Site Potential If score is: ✓ **12-16 = H** ___ **6-11 = M** ___ **0-5 = L** *Record the rating on the first page*

R 2.0. Does the landscape have the potential to support the water quality function of the site?		
R 2.1. Is the wetland within an incorporated city or within its UGA? City of Spokane, WA.	Yes = 2 No = 0	2
R 2.2. Does the contributing basin include a UGA or incorporated area? Spokane River	Yes = 1 No = 0	1
R 2.3. Does at least 10% of the contributing basin contain tilled fields, pastures, or forests that have been clearcut within the last 5 years?	Yes = 1 No = 0	1
R 2.4. Is > 10% of the area within 150 ft of wetland in land uses that generate pollutants? Ash St.	Yes = 1 No = 0	
R 2.5. Are there other sources of pollutants coming into the wetland that are not listed in questions R 2.1-R 2.4? Source_____	Yes = 1 No = 0	0
Total for R 2	Add the points in the boxes above	4

Rating of Landscape Potential If score is: ✓ **3-6 = H** ___ **1 or 2 = M** ___ **0 = L** *Record the rating on the first page*

R 3.0. Is the water quality improvement provided by the site valuable to society?		
R 3.1. Is the wetland along a stream or river that is on the 303(d) list or on a tributary that drains to one within 1 mi? Spokane River @ Monroe Dr.	Yes = 1 No = 0	1
R 3.2. Does the river or stream have TMDL limits for nutrients, toxics, or pathogens?	Yes = 1 No = 0	0
R 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? *Answer YES if there is a TMDL for the drainage in which wetland is found.*	Yes = 2 No = 0	2
Total for R 3 Spokane River TMDL.	Add the points in the boxes above	3

Rating of Value If score is: ✓ **2-4 = H** ___ **1 = M** ___ **0 = L** *Record the rating on the first page*

Wetland name or number WU-1 Drumheller Springs Creek Type N.

These questions apply to wetlands of all HGM classes. **HABITAT FUNCTIONS** - Indicators that site functions to provide important habitat	(only 1 score per box)
H 1.0. Does the wetland have the potential to provide habitat for many species?	16
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 √ 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) 4 or more checks: points = 3 3 checks: points = 2 2 checks: points = 1 1 check: points = 0	3
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 ¼ ac **OR** 10% of its area during the March to early June **OR** in August to the end of September? ***Answer YES 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 ¼ 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 10 Scoring: > 9 species: points = 2 4-9 species: points = 1 < 4 species: points = 0	2
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.* **None** = 0 points **Low** = 1 point **Moderate** = 2 points All three diagrams in this row are **High** = 3 points Riparian braided channels with 2 classes	Figure ~~1~~ Att 2 2

Wetland name or number WW-1 DRUMHELLER SPRINGS CREEK Type N Waterbody

H 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. ___ Cattails 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 ___ Invasive species cover less than 20% in each stratum of vegetation *(canopy, sub-canopy, shrubs, herbaceous, moss/ground cover)*	2
Total for H 1 — Add the points in the boxes above	12

Rating of Site Potential If score is: ___ 15-18 = H ✓ 7-14 = M ___ 0-6 = L *Record the rating on the first page*

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:* % undisturbed habitat 10 + [(% moderate and low intensity land uses)/2] 10 = 20 % > 1/3 (33.3%) of 1 km Polygon Bat Cave Area. 20 % 20-33% of 1km Polygon — points = 2 10-19% of 1km Polygon 70% High Intensity — points = 1 <10% of 1km Polygon — points = 0	2
H 2.2. Undisturbed habitat in 1 km Polygon around wetland. *Calculate:* % undisturbed habitat 0 + [(% moderate and low intensity land uses)/2] 30 = 30 % (60) Undisturbed habitat > 50% of Polygon — points = 3 Undisturbed habitat 10 - 50% and in 1-3 patches Audobann Park + Spokane River — points = 2 Undisturbed habitat 10 - 50% and > 3 patches 70% High Intensity — points = 1 Undisturbed habitat < 10% of Polygon — points = 0	2
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 = 0	-2
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 = 3 No = 0	0
Total for H 2 — Add the points in the boxes above	2

Rating 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?	
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 ✓ 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 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 = 1 Site does not meet any of the criteria above — points = 0	2

Rating of Value If score is: ✓ 2 = H ___ 1 = M ___ 0 = L *Record the rating on the first page*

" Drumheller Springs Creek Type IV Waterbody
WH-1 Drumheller Springs Park / Parcel 25014.4609
Conservation Area Spokane WA.

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 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 name or number WW2 PEMIC Drumheller Springs Park/ Conservation Area Spokane, WA.

RATING SUMMARY – Eastern Washington

Name of wetland (or ID #): Drumheller Springs Park/ Conservation Area Date of site visit: 5/15 + 6/03/2025.

Rated by S. Collins Trained by Ecology? ✓ Yes ___ No Date of training 11/2022

HGM Class used for rating Depressional Wetland has multiple HGM classes? ___Y ✓ N

NOTE: Form is not complete without the figures requested (*figures can be combined*).

Source of base aerial photo/map USDA NAIP APFO GIS Server Online Zoom, Please see Attachments 3 of "Certified Wetland Report".

OVERALL WETLAND CATEGORY _____ (based on functions___ or special characteristics___)

1. Category of wetland based on FUNCTIONS

✓ **Category I** – Total score = 22-27 250ft Wetland Buffer Required as per Table 17.E.070.110.3 City of Spokane, WA.

_____ **Category II** – Total score = 19-21

_____ **Category III** – Total score = 16-18

_____ **Category IV** – Total score = 9-15

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
	Circle the appropriate ratings			
Site Potential	H (M) L	H (M) L	H (M) L	
Landscape Potential	H (M) L	(H) M L	H (M) L	
Value	(H) M L	(H) M L	(H) M L	TOTAL
Score Based on Ratings	7	8	7	22

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

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

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY *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	

Wetland name or number WU-1, 2, 3. Drumheller Springs Park/Conservation Area + Drumheller Springs Creek Type N Watered body

Maps and figures required to answer questions correctly for Eastern Washington

Depressional Wetlands – WU-2

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 – WU-1 "Drumheller Springs Creek – R4

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 wetland *(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)	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)	S 3.3	

Stand name or number: WW-2 PEMIC Drumheller Springs Park/Conservation Area. Spokane, WA.

DEPRESSIONAL WETLANDS **Water Quality Functions** - Indicators that the site functions to improve water quality		Points (only 1 score per box)
D 1.0. Does the site have the potential to improve water quality?		
D 1.1. Characteristics of surface water outflows from the wetland:		
Wetland has no surface water outlet	points = 5	5
Wetland has an intermittently flowing outlet	points = 3	
Wetland has a highly constricted permanently flowing outlet	points = 3	
Wetland has a permanently flowing, unconstricted, surface outlet	points = 1	
D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic *(use NRCS definitions of soils)*	YES = 3 NO = 0	0
D 1.3. Characteristics of persistent vegetation (Emergent, Scrub-shrub, and/or Forested Cowardin classes)		
Wetland has persistent, ungrazed, vegetation for > 2/3 of area White Tailed Deer.	points = 5	
Wetland has persistent, ungrazed, vegetation from 1/3 to 2/3 of area	points = 3	3
Wetland has persistent, ungrazed vegetation from 1/10 to < 1/3 of area	points = 1	
Wetland has persistent, ungrazed vegetation < 1/10 of area	points = 0	
D 1.4. Characteristics of seasonal ponding or inundation: *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 of wetland	points = 3	3
Area seasonally ponded is ¼ - ½ total area of wetland	points = 1	
Area seasonally ponded is < ¼ total area of wetland	points = 0	
Total for D 1	Add the points in the boxes above	11
Rating of Site Potential If score is: ___ 12- 16 = H √ 6- 11 = M ___ 0- 5 = L	*Record the rating on the first page*	

D 2.0. Does the landscape have the potential to support the water quality function of the site?		
D 2.1. Does the wetland receive stormwater discharges? Ash Pl, Euclid & Liberty Drives.	Yes = 1 No = 0	1
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants?	Yes = 1 No = 0	0
D 2.3. Are there septic systems within 250 ft of the wetland?	Yes = 1 No = 0	1
D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1- D 2.3? Source_____	Yes = 1 No = 0	0
Total for D 2	Add the points in the boxes above	
Rating of Landscape Potential If score is: ___ 3 or 4 = H √ 1 or 2 = M ___ 0 = L	*Record the rating on the first page*	

D 3.0. Is the water quality improvement provided by the site valuable to society?		
D 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, 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 where water quality is an issue in some aquatic resource [303(d) list, eutrophic lakes, problems with nuisance and toxic algae]? Spokane River	Yes = 1 No = 0	1
D 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality *(answer YES if there is a TMDL for the drainage or basin in which the wetland is found)*?	Yes = 2 No = 0	2
Total for D 3	Add the points in the boxes above	3
Rating of Value If score is: √ 2-4 = H ___ 1 = M ___ 0 = L	*Record the rating on the first page*	

S. Gallis
ECOS USA 1/04/2025

Wetland name or number WH-2 PEMIC Drumheller Springs Park/Conservation Area
Freshwater Emergent Wetlands

DEPRESSIONAL WETLANDS

Hydrologic Functions - Indicators that the site functions to reduce flooding and erosion.

		Points (only 1 score per box)
D 4.0. Does the site have the potential to reduce flooding and erosion?		
D 4.1. Characteristics of surface water outflows from the wetland:		
Wetland has no surface water outlet	points = 8	8
Wetland has an intermittently flowing outlet	points = 4	
Wetland has a highly constricted permanently flowing outlet	points = 4	
Wetland has a permanently flowing unconstricted surface outlet	points = 0	
(If outlet is a ditch and not permanently flowing treat wetland as "intermittently flowing")		
D 4.2. Depth of storage during wet periods: *Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or 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 = 6	
The wetland is a headwater wetland	points = 4	
Seasonal ponding: 1 ft - < 2 ft	points = 4	4
Seasonal ponding: 6 in - < 1 ft	points = 2	
Seasonal ponding: < 6 in or wetland has only saturated soils	points = 0	
Total for D 4	Add the points in the boxes above	

Rating of Site Potential If score is: ___ 12-16 = H ✓ 6-11 = M ___ 0-5 = L *Record the rating on the first page*

D 5.0. Does the landscape have the potential to support the hydrologic functions of the site?		
D 5.1. Does the wetland receive stormwater discharges? Ash Pl, Euclid, + Liberty Drives.	Yes = 1 No = 0	1
D 5.2. Is > 10% of the area within 150 ft of the wetland in a land use that generates runoff?	Yes = 1 No = 0	1
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses?	Yes = 1 No = 0	1
Total for D 5	Add the points in the boxes above	3

Rating of Landscape Potential If score is: ✓ 3 = H ___ 1 or 2 = M ___ 0 = L *Record the rating on the first page*

D 6.0. Are the hydrologic functions provided by the site valuable to society?		
D 6.1. The 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 Spokane R.	points = 2	2
Surface flooding problems are in a sub-basin farther down-gradient D Menach Dr.	points = 1	
The existing or potential outflow from the wetland is so constrained by human or natural conditions that the water stored by the wetland cannot reach areas that flood.		
Explain why _____		
There are no problems with flooding downstream of the wetland	points = 0	
	points = 0	
D 6.2. Has the site has been identified as important for flood storage or flood conveyance in a regional flood control plan?	Yes = 2 No = 0	0
Total for D 6	Add the points in the boxes above	

Rating of Value If score is: ✓ 2-4 = H ___ 1 = M ___ 0 = L *Record the rating on the first page*

S. Galbraith
ECOS USA
6/04/2025.

Wetland name or number WW2PEMC Drumheller Springs Park. Spokane, WA.

These questions apply to wetlands of all HGM classes. **HABITAT FUNCTIONS** - Indicators that site functions to provide important habitat	(only 1 score per 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 >= 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 ✓ 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) 4 or more checks: points = 3 3 checks: points = 2 2 checks: points = 1 1 check: points = 0	3
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 ¼ ac **OR** 10% of its area during the March to early June **OR** in August to the end of September? *Answer YES 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 ¼ 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 ft^2. *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 10 Scoring: > 9 species: points = 2 4-9 species: points = 1 < 4 species: points = 0	2
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.* **None** = 0 points **Low** = 1 point **Moderate** = 2 points All three diagrams in this row are **High** = 3 points Riparian braided channels with 2 classes	Figure ATT 3 2

Wetland name or number WW2 PEMIC Drumheller Springs Park/Conservation Area, Spokane, WA.

H 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. ___ Cattails 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 ___ Invasive species cover less than 20% in each stratum of vegetation *(canopy, sub-canopy, shrubs, herbaceous, moss/ground cover)*	3
Total for H 1 — Add the points in the boxes above	13

Rating of Site Potential If score is: ___ **15-18 = H** ✓ **7-14 = M** ___ **0-6 = L** *Record the rating on the first page*

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:* % undisturbed habitat 0 + [(% moderate and low intensity land uses)/2] 50 = 25 % > 1/3 (33.3%) of 1 km Polygon Vernal Pools Surround "WW-3" — points = 3 20-33% of 1km Polygon Camas Wet Meadow + Drumheller Springs — points = 2 10-19% of 1km Polygon Creek. — points = 1 <10% of 1km Polygon — points = 0	2
H 2.2. Undisturbed habitat in 1 km Polygon around wetland. *Calculate:* % undisturbed habitat 0 + [(% moderate and low intensity land uses)/2] 30 = 30 % Undisturbed habitat > 50% of Polygon — points = 3 Undisturbed habitat 10 - 50% and in 1-3 patches — points = 2 Undisturbed habitat 10 - 50% and > 3 patches — points = 1 Undisturbed habitat < 10% of Polygon — points = 0	2
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 = 0	- 2
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 = 3 No = 0	0
Total for H 2 — Add the points in the boxes above	2

Rating 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?	
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 ✓ 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 Brown Bat — 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 = 1 Site does not meet any of the criteria above — points = 0	2

Rating of Value If score is: ✓ **2 = H** ___ **1 = M** ___ **0 = L** *Record the rating on the first page*

WU-2 PEMIC Wetland

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*). Brown Bat.

✓ **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. >110 yrs old Pacific Willow plant association.

— **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.

5 Total

SGehlsen
ECOS USA 6/06/2025.

WH-2 Drumheller Springs Park/Conservation

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*). Brown Bat, Freshwater Emergent Wetlands.

✓ **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. Pacific Willows > 110 Years.

— **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. Drumheller Springs Creek Type N. S1 F 6/03/2025.

✓ **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. Above E. Cliffs 50% Slopes. Brown Bat.

✓ **Cliffs:** Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation. ~ 20-25' (H)

✓ **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.

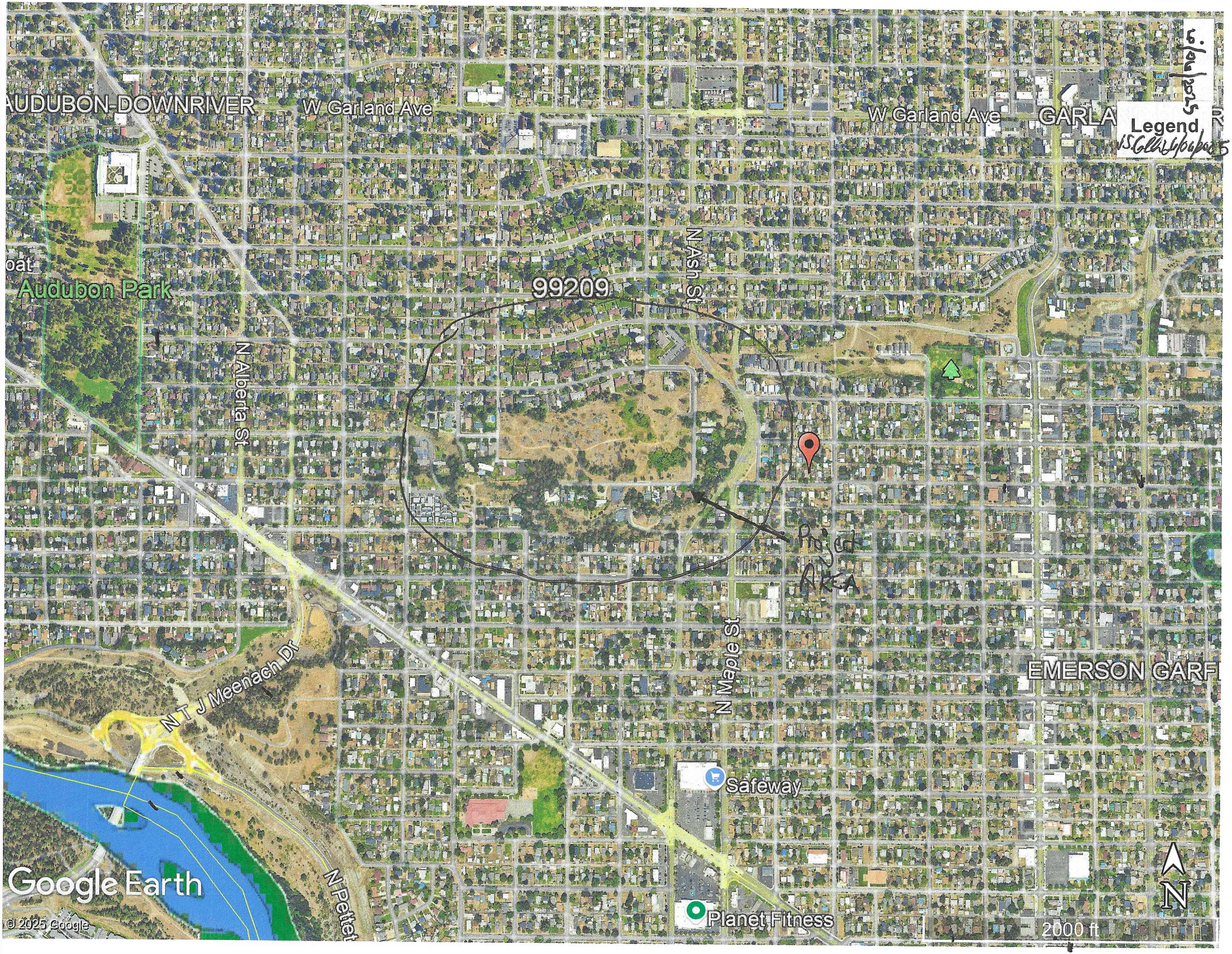
✓ **Shrub-steppe:** A nonforested vegetation type consisting of one or more layers of perennial bunchgrasses and a conspicuous but discontinuous layer of shrubs (see Eastside Steppe for sites with little or no shrub cover).

✓ **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.

✓ S. Collins
ECOS USA
6/04/2025.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N Alberta St
N Maple St
N T J Meenach Dr
N Petter
EMERSON GARF
Safeway
Planet Fitness
Google Earth
© 2025 Google
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Wetland name or number WU-3 Drumheller Springs Park/Conservation Area Vernal Pools Area. City of Spokane Parks + Recreation Dept. Spokane Co. WA.

RATING SUMMARY – Eastern Washington

Name of wetland (or ID #): Drumheller Springs Park Date of site visit: 5/15+6/03/2025

Rated by S. Collins Trained by Ecology? ✓ Yes ___ No Date of training 11/2022

HGM Class used for rating Depressional Wetland has multiple HGM classes? ✓ Y ___ N

NOTE: Form is not complete without the figures requested (*figures can be combined*).

Source of base aerial photo/map USDA NAIP APFO GIS Server Online, 6/06/2025. Please see Attachments 3 of "Certified Wetland Report".

OVERALL WETLAND CATEGORY II (based on functions___ or special characteristics___)

1. Category of wetland based on FUNCTIONS N/A

___ **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	Improving Water Quality			Hydrologic			Habitat			TOTAL
	Circle the appropriate ratings									
Site Potential	H	M	L	H	M	L	H	M	L	
Landscape Potential	H	M	L	H	M	L	H	M	L	
Value	H	M	L	H	M	L	H	M	L	
Score Based on Ratings										

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** (150' Wetland Buffer per City of Spokane Table 17.E.070.110-2a)	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		

200ft Required Wetland Buffer as per TABLE 17.E. 070.110.3.

✓ S. Collins ECOS USA 6/06/2025.

Wetland name or number WW-3 Drumheller Springs Park / Conservation Area + Drumheller Springs Vernal Pools Area. City of Spokane Spokane Co. WA.

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 criteria that apply to the wetland. Circle the category when the appropriate criteria are met.*	**Category**
SC 1.0. Vernal pools Is the wetland **less than 4000 ft²**, 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. 14 Days. ~ May 1 - May 15, 2015 **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**	
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.)? ① PEMIC - ② R4RB1 - Drumheller Springs Creek Type N Waterbody + ③ Vernals Pools across the street. **Yes = Category II No = Category III**	**Cat. II** **Cat. III**
SC 2.0. Alkali wetlands ① Ash Pl. + Liberty Dr. ② Camas Wet Meadow Plant Assoc. ~.67mi. to Spokane River ③ Menach Dr. Does the wetland meet **one** of the following criteria? — The wetland has a conductivity > 3.0 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 salt. **OR** does the wetland unit meet two of the following three sub-criteria? — Salt encrustations around more than 75% of the edge of the wetland — More than ⅓ of the plant cover consists of species listed on Table 4 — A pH above 9.0. All alkali wetlands have a high pH, but please note that some freshwater wetlands may also have a high pH. Thus, pH alone is not a good indicator of alkali wetlands. **Yes = Category I No= Not an alkali wetland**	**Cat. I**
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 Conservation Value? **Yes – Go to SC 3.2 No – Go to SC 3.3** SC 3.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? **Yes = Category I No = Not a WHCV** SC 3.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf **Yes – Contact WNHP/WDNR and go to SC 3.4 No = Not a WHCV** 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**	**Cat. I**

✓ S. Collins
ECOS USA 6/6/2015

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: WL1 Drumheller Springs Creek (1630 W Euclid Ave.) City/County: Spokane, Spokane (Parcel # 25014.4609 99205) Sampling Date: 5/15+6/03/2025

Applicant/Owner: D. Flynn (on behalf Concerned Companions) State: WA Sampling Point: Wet1 WL1-1

Investigator(s): S. Collins + B. Kinard Section, Township, Range: Sec1 T25NR42E

Landform (hillslope, terrace, etc.): basalt riverine terrace F1 Local relief (concave, convex, none): concave Slope (%): 15-18%

Subregion (LRR): Arid West Lat: 467273 N Long: 5281562 Datum: NAD83 Zone11N utm (2m)

Soil Map Unit Name: 3117 Northstar-RockOutcrop-Rocky-Cocolalla 0-15% Slopes NWI classification: Riverine R4RB1

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ✓ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No ✓

Are Vegetation ____, Soil ____, or Hydrology ✓ naturally problematic? F2 (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No ____	Is the Sampled Area within a Wetland? Yes ✓ No ____
Hydric Soil Present?	Yes ✓	No ____	
Wetland Hydrology Present?	Yes ✓	No ____	

Remarks: Parcel #25014.4609 – Owner City of Spokane Parks + Recreation. F1 – 5% Slope – Bat Cave, Cliff ~20-25'(H) Right Bank.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30x30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Douglas Fir – Pseudotsuga menziesii	10	N	FACU
2. Western Cedar – Thuja plicata	5	N	FAC
3. Norway Maple* Acer platanoides	10	Y	FACU
4. Siberian Elm – Elmus pumila	5	N	UPL
5. Chestnut – Castanea sp.	5	N	UPL
	40	= Total Cover	

Sapling/Shrub Stratum (Plot size: 30'x30')			
1. Choke Cherry* – Prunus virginiana	5	N	FAC
2. Oregon grape – Berberis aquifolium	10	N	FACU
3. Apricot – Prunus armeniaca	5	N	FACU
4. Mahleb Cherry – Prunus mahleb	5	N	FACU
5.			
6. Engelmann – Picea engelmannii	20	N	FACU
	30	= Total Cover	

Herb Stratum (Plot size: 30x30')			
1. Dandelion – Taraxacum officinale	5	N	FACU
2.			
3. Bedstraw – Galium boreale	5	N	FACU
4. Bentgrass – Agrostis idahoensis	5	N	FACW
5. Bison Ivy – Toxicodendron radicans	5	N	FAC
6.			
7. Bluejoint – Calamagrostis canadensis	10	N	FACW
8.			
	30	= Total Cover	

Woody Vine Stratum (Plot size: 30x30')			
1. Virginia Creeper – Parthenocissus quinquefolia	3	N	FACU
2.			
	100%	= Total Cover	

% Bare Ground in Herb Stratum 70% % Cover of Biotic Crust 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	2	x 2 =	4
FAC species	3	x 3 =	9
FACU species	7	x 4 =	28
UPL species	2	x 5 =	10
Column Totals:	14 (A)		51 (B)

Prevalence Index = B/A = 3.7

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

✓ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks: Proposed, 2, Townhouse Developments near ~100' from Drumheller Springs Creek 250ft Critical Area Riparian Buffer. Please see Certified Wetland Reports + All Attachments 3,

✓S. Collins ECOS USA 6/10/2025 + 6/14/2025

SOIL 3117 Northstar-Rock Outcrop-Rockly-Cocolalla 0-5% Slopes Sampling Point: WU-1SPWet1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-1								CFPOM; Ashy
1-36"			10YR 3/2		C	PL	SSSP	Brown Silt Loam Very Dark Thick Dark Surface;
36"								Basalt Bedrock
								Medium Fine Roots;
								Oxidized. Mottled.

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ✓ Histic Epipedon (A2) "Mollic"
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ✓ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ✓ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
Type: Basalt Bedrock
Depth (inches): 36"

Hydric Soil Present? Yes ✓ No ___

Remarks:
Please see "Certified Wetland Report" - All Attachment 3. "Soil Maps + Desc.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ✓ Surface Water (A1)
- ✓ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ✓ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ✓ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ✓ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
- ___ Salt Crust (B11)
- ✓ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (LRR A)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ✓ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (LRR A)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes ✓	No ___	Depth (inches): 0-1"
Water Table Present?	Yes ✓	No ___	Depth (inches): 0-1"
Saturation Present? (includes capillary fringe)	Yes ✓	No ___	Depth (inches): 0-1"

Wetland Hydrology Present? Yes ✓ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
* - The Type N "Drumheller Springs Creek has been piped, diverted into an underground stormwater system under ash street Creek was 51°F on 6/03/2025.
Bankfull Width Average ~2.5ft / Average Bankfull Height ~.2m
Average Wetted Depth .01(m).

JS. Gill ECOSUSA
6/10/2025

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: ~~X~~ Drumheller Springs Park City/County: Spokane, Spokane Sampling Date: 5/15+6/03/2025

Applicant/Owner: D. Flynn (on behalf of Concerned Companions) State: WA Sampling Point: UPL-1

Investigator(s): S. Collins Section, Township, Range: 01 T25N R42E

Landform (hillslope, terrace, etc.): 2nd terrace-basalt Local relief (concave, convex, none): none Slope (%): 2%

Subregion (LRR): Arid West E Lat: 467235 N Long: 528162 Datum:

Soil Map Unit Name: Urban Northstar-Rock Outcrop 0-15% NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology ✓ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ✓

Are Vegetation _____, Soil _____, or Hydrology ✓ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	Is the Sampled Area within a Wetland? Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:
596 m (ELEV)
(2) Proposed townhouse development @ Liberty / N. Ash Pl bordering the Park. Rd junction

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30'x30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Ponderosa pine - Pinus ponderosa	5	N	UPL
2. Mountain Ash	5	N	UPL
3.			
4.			
	5 = Total Cover		
Sapling/Shrub Stratum (Plot size: 30'x30')			
1. Snowberry			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 3'x50')			
1. Idaho Fescue			
2. Intr. Bachelor Button			
3. Bitterroot			
4.			
5.			
6.			
7.			
8.			
	= Total Cover		
Woody Vine Stratum (Plot size: 30'x30')			
1.			
2.			
	= Total Cover		

(Basalt monads scabland)
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet: N/A
Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
Total Number of Dominant Species Across All Strata: _____ (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet: N/A

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:
Please see WH-1 "Wetland Determination Data Form - R2 as is same soil unit + sample.

✓S. Collins ECOS 6/16/2025 6/14/2025

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: WW-2 Drumheller Springs Park City/County: Spokane, Spokane Sampling Date: 5/15+6/03/2025
Applicant/Owner: D. Flynn (on behalf of Concerned Companions State: WA Sampling Point: WW-2 Wet 1
Investigator(s): S. Collins + B. Kernaud Section, Township, Range: 01 T25N R42E
Landform (hillslope, terrace, etc.): Flat scabland basalt Local relief (concave, convex, none): none Slope (%): 0-1%
Subregion (LRR): Arid West E Lat: 467212 N Long: 5281590 Datum: NAD83ZIINUTM (2m)
Soil Map Unit Name: 3117-Northstar-Rockoutcrop-Rockly complex-Coralalla NWI classification: Depressional PEMIC
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ✓ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No ✓
Are Vegetation ____, Soil ____, or Hydrology ✓ naturally problematic? F, (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No ____	Is the Sampled Area within a Wetland?	Yes ✓ No ____
Hydric Soil Present?	Yes ✓ No ____		
Wetland Hydrology Present?	Yes ✓ No ____		

Remarks:
F. – Long term residences along W. Euclid have witnessed lowering depths of South pond after a stormwater drain diversion project w/ City of Spokane. Pers. Com. T. Ray 6/03/2025.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30x30')			
1. Pacific Willow (Salix lasiandra)	30	Y	FACW
2. (4 Old Growth) >10 yrs old.			
3. Intro. Silver Poplar	3	N	FAC
4.			
	33	= Total Cover	
Sapling/Shrub Stratum (Plot size: 30x30')			
1. Wood Rose - (Rosa Woodsii)	3	N	FACU
2. Oregon Grape (Berberis nervosa)	3	N	UPL
3. Red Osier Dogwood (Cornus alba)	20	Y	FACW
4. Choke Cherry (Prunus virginia)	3	N	FAC
5.			
	29	= Total Cover	
Herb Stratum (Plot size: 30x30')			
1. Reed Canary Grass - (Phalaris arundinacea)	20	Y	FACW
2. Foxtail (Alopecurus pratensis)	10	N	FACW
3. Camas - Camassia quamash)	3	N	FACW
4. Wild Onion (Allium geyeri)	3	N	FACU
5. Desert Parsley (Lomatium brandshawii	20	Y	FACW
6. Wasatch Desert Parsley ("	3	N	FACU
7. Bitterroot (Lewisia rediviva)	3	N	FACU
8. Wild Celery (Lomatium nudicaule) - Cooks Desert Parsley (Lomatium cookii)	30	Y	OBL
		= Total Cover	
Woody Vine Stratum (Plot size: 30 x 30')			
9. Intr. Iris - (Iris sp.)	3	N	OBL
10. Poison Ivy - Toxicendendron	3	N	FAC
11. Wild Carrot (Rerideridia gairdneri radicans)		= Total Cover	FAC

% Bare Ground in Herb Stratum 20 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
Total Number of Dominant Species Across All Strata: 5 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	2	x 1 =	2
FACW species	5	x 2 =	10
FAC species	2	x 3 =	6
FACU species	5	x 4 =	20
UPL species	1	x 5 =	5
Column Totals:	15 (A)		43 (B)

Prevalence Index = B/A = 2.9

Hydrophytic Vegetation Indicators:
✓ Dominance Test is >50%
✓ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks:
Fairy Shrimp observed May 2024 by T. Ray + S. Collins on 5/15/2025 in South Pond N5281583 E467171. 583m ELEV. Please see Certified Wetland Report + All Attachments 3.

S. Collins ECOS USA 4/30/2025 + 6/14/2025

SOIL 3117 - Northstar Rock Outcrop-Rocky Complex-Cocolalla 0-50% Slopes Sampling Point: WU-2 Wetl2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-1								Poison Ivy CFPOM
1-36"			10YR3/2	—	C	PL	SSSP	Very Dark Ashy Silt Loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- √ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- √ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
Type: Basalt Bedrock
Depth (inches): 36"

Hydric Soil Present? Yes √ No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- √ Surface Water (A1) S. Pond
- √ High Water Table (A2) N Pond
- √ Saturation (A3) 5/15/2025
- ___ Water Marks (B1)
- √ Sediment Deposits (B2)
- √ Drift Deposits (B3)
- √ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (LRR A)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (LRR A)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes √	No ___	Depth (inches): 0-1"
Water Table Present?	Yes √	No ___	Depth (inches): 0-1"
Saturation Present? (includes capillary fringe)	Yes √	No ___	Depth (inches): 0-1"

Wetland Hydrology Present? Yes √ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Please see Attachments 3 of "Certified Wetland Report"

Remarks:
Please see "Certified Wetland Report"

SG Phs
ECOS USD 6/10/2025

Riparian Constancy Tables. - WK-2 Depressional Freshwater Emergent PEMIC
D. Flynn (on behalf of Concerned Companion Drumheller Springs Park City of Spokane WA.

Table 15—Constancy and mean cover of important plant species in the SALIX plant associations—Part 1 (continued)

Species	Code	SACO2/ CASCB-CASP 5 plots		SACO2/ MESIC FORB 5 plots		SAFA/ CANI2 2 plots		SAFA/ CASCB-CASP 10 plots		SAFA/ CASCP2 14 plots		SAFA/ CAUT 10 plots	
		CON	COV	CON	COV	CON	COV	CON	COV	CON	COV	CON	COV
Sitka sedge	CAAQS	—	—	—	—	—	—	—	—	—	—	60	31
Buxbaum's sedge	CABU2	—	—	—	—	—	—	—	—	—	—	10	5
Cusick's sedge	CACU2	—	—	—	—	—	—	—	—	—	—	—	—
lesser panicled sedge	CADI2	—	—	—	—	—	—	—	—	—	—	—	—
woolly sedge	CALA3	—	—	—	—	—	—	—	—	—	—	—	—
slender sedge	CALA4	—	—	—	—	—	—	—	—	—	—	10	2
lenticular sedge	CALE5	—	—	—	—	—	—	10	13	—	—	10	80
mud sedge	CALI	—	—	—	—	—	—	—	—	—	—	10	3
black alpine sedge	CANI2	40	9	60	2	100	25	70	13	7	5	—	—
poor sedge	CAPA9	—	—	—	—	—	—	—	—	—	—	10	3
russet sedge	CASA2	—	—	—	—	—	—	—	—	—	—	—	—
Holm's sedge	CASCB	60	8	—	—	100	3	80	27	—	—	—	—
saw-leaved sedge	CASCP2	—	—	20	2	—	—	—	—	100	30	—	—
showy sedge	CASP	60	13	60	1	—	—	30	20	—	—	—	—
bladder sedge	CAUT	—	—	—	—	—	—	—	—	57	8	90	18
inflated sedge	CAVE	—	—	—	—	—	—	—	—	—	—	—	—
timber oatgrass	DAIN	—	—	—	—	—	—	10	Tr	29	1	—	—
few-flowered spike-rush	ELPA2	—	—	—	—	—	—	—	—	—	—	—	—
many-spiked cotton-grass	ERPO2	—	—	—	—	50	Tr	10	1	—	—	—	—
green-keeled cotton-grass	ERVI	—	—	—	—	—	—	10	2	—	—	10	1
tall mannagrass	GLEL	—	—	—	—	—	—	—	—	—	—	10	1
reed mannagrass	GLGR	—	—	—	—	—	—	—	—	—	—	—	—
Drummond's rush	JUDR	—	—	60	1	100	1	30	3	—	—	—	—
small-fruited bulrush	SCMI	—	—	—	—	—	—	—	—	—	—	10	15
Ferns and fern allies:													
common horsetail	EQAR	—	—	40	10	—	—	—	—	14	Tr	30	1

[a] CON = percentage of plots in which the species occurred.
[b] COV = average canopy cover in plots in which the species occurred.
[c] Tr = trace cover, less than 1 percent canopy cover.

Table 15—Constancy and mean cover of important plant species in the SALIX plant associations—Part 2

Species	Code	SAFA/ DAIN 2 plots		SAFA/ ELPA2-ERPO2 6 plots		SALIX/ ALLUVIAL BAR 16 plots		SALIX/ EQUIS 3 plots		SALIX/ GLEL 4 plots		SALIX/ MESIC FORB 16 plots	
		CON[a]	COV[b]	CON	COV	CON	COV	CON	COV	CON	COV	CON	COV
Tree overstory:													
Engelmann spruce	PIEN	—	—	—	—	6	Tr[c]	—	—	25	5	25	1
Tree understory:													
Engelmann spruce	PIEN	—	—	50	2	31	Tr	—	—	25	1	38	3
Shrubs:													
mountain alder	ALIN	—	—	17	5	19	10	100	2	25	3	13	33
Sitka alder	ALSI	—	—	—	—	38	7	—	—	25	15	56	16
bog birch	BEGLG	50	7	33	18	—	—	—	—	—	—	6	20
red-osier dogwood	COST	—	—	—	—	38	3	—	—	—	—	38	13
prickly currant	RILA	—	—	—	—	13	4	—	—	25	1	13	5
western thimbleberry	RUPA	—	—	—	—	13	1	—	—	—	—	31	8
Bebb's willow	SABE	—	—	—	—	—	—	—	—	25	Tr	6	15
Booth's willow	SABO2	—	—	—	—	—	—	—	—	25	40	—	—
hoary willow	SACA9	—	—	—	—	—	—	—	—	—	—	6	2
Cascade willow	SACA6	—	—	—	—	—	—	—	—	—	—	—	—
undergreen willow	SACO2	—	—	—	—	6	7	—	—	—	—	13	13
Drummond's willow	SADR	—	—	—	—	—	—	33	3	25	70	6	7
coyote willow	SAEX	—	—	—	—	6	50	—	—	—	—	6	10
Farr's willow	SAFA	50	25	50	28	—	—	—	—	—	—	6	Tr
Geyer's willow	SAGEG	—	—	—	—	—	—	—	—	—	—	—	—
Geyer's willow	SAGEM	—	—	—	—	—	—	—	—	—	—	—	—
glaucous willow	SAGL	—	—	—	—	—	—	—	—	—	—	—	—
whiplash willow	SALAC	—	—	—	—	13	3	100	4	25	25	6	10
Pacific willow	SALAL	—	—	—	—	6	2	—	—	—	—	6	Tr
dusky willow	SAME2	—	—	—	—	56	29	33	65	—	—	6	65
Piper's willow	SAPI	—	—	—	—	—	—	—	—	—	—	—	—
tea-leaved willow	SAPLM2	50	30	33	23	—	—	—	—	—	—	—	—
Mackenzie's willow	SARIM	—	—	—	—	6	3	100	42	—	—	19	12
Scouler's willow	SASC	—	—	—	—	13	4	—	—	—	—	6	99

V S. Gallant ECDS USA 6/17/2025

Riparian Constancy Tables cont. . .

Table 15—Constancy and mean cover of important plant species in the SALIX plant associations—Part 2 (continued)

Species	Code	SAFA/ DAIN 2 plots		SAFA/ ELPA2-ERPO2 6 plots		SALIX/ ALLUVIAL BAR 16 plots		SALIX/ EQUIS 3 plots		SALIX/ GLEL 4 plots		SALIX/ MESIC FORB 16 plots	
		CON	COV	CON	COV	CON	COV	CON	COV	CON	COV	CON	COV
Sitka willow	SASI2	–	–	–	–	94	38	33	3	75	47	81	71
willow species	SALIX	–	–	–	–	–	–	–	–	–	–	–	–
Douglas spiraea	SPDO	–	–	17	2	–	–	–	–	25	1	6	Tr
Low shrubs and subshrubs:													
Merten's moss-heather	CAME	–	–	–	–	–	–	–	–	–	–	–	–
myrtle pachistima	PAMY	–	–	–	–	13	Tr	–	–	–	–	–	–
red mountain-heath	PHEM	–	–	–	–	–	–	–	–	–	–	–	–
cream mountain-heath	PHGL	–	–	–	–	–	–	–	–	–	–	–	–
dwarf huckleberry	VACA	100	23	17	25	–	–	–	–	–	–	–	–
Cascade huckleberry	VADE	–	–	–	–	–	–	–	–	–	–	–	–
grouse huckleberry	VASC	–	–	–	–	6	5	–	–	–	–	–	–
Perennial forbs:													
sharptooth angelica	ANAR	–	–	17	Tr	31	1	–	–	25	1	81	2
alpine leafybract aster	ASFO	50	5	–	–	6	Tr	–	–	25	1	19	5
fewflower aster	ASMO	50	5	–	–	13	5	–	–	25	Tr	31	9
twinflower marshmarigold	CABI	–	–	–	–	–	–	–	–	–	–	–	–
elkslip	CALE2	50	3	–	–	–	–	–	–	–	–	–	–
peregrine fleabane	ERPE	–	–	–	–	–	–	67	Tr	50	25	–	–
northern bluebells	MEPAB	–	–	–	–	13	Tr	–	–	50	3	38	10
broadleaved montia	MOCO	–	–	–	–	13	1	–	–	25	15	19	5
fanleaf cinquefoil	POFL2	–	–	–	–	13	Tr	–	–	–	–	19	Tr
marsh cinquefoil	POPA3	–	–	67	10	–	–	–	–	–	–	–	–
dotted saxifrage	SAPU	–	–	–	–	6	Tr	–	–	50	3	31	3
cleftleaf groundsel	SECY	50	2	–	–	–	–	–	–	–	–	–	–
arrowleaf groundsel	SETR	–	–	–	–	19	1	–	–	50	4	56	3
globeflower	TRLA4	50	3	–	–	6	Tr	–	–	–	–	–	–
Sitka valerian	VASI	–	–	–	–	6	1	–	–	25	15	25	15
American false hellebore	VEVI	–	–	–	–	–	–	–	–	50	2	13	7
thyme-leaved speedwell	VESE	–	–	–	–	6	Tr	–	–	–	–	6	Tr
Wormskjold's speedwell	VEWO	50	Tr	–	–	–	–	–	–	–	–	6	1
pioneer violet	VIGL	–	–	–	–	19	1	–	–	50	14	69	6
Macloskey's violet	VIMA	–	–	33	2	–	–	–	–	–	–	–	–
marsh violet	VIPA2	–	–	–	–	–	–	–	–	–	–	–	–
Grasses or grasslike:													
bluejoint reedgrass	CACA	100	2	33	10	19	3	–	–	25	15	25	1
Columbia sedge	CAAP3	–	–	–	–	–	–	–	–	–	–	–	–
water sedge	CAAQA	–	–	17	3	–	–	–	–	–	–	–	–
Sitka sedge	CAAQS	–	–	17	5	–	–	–	–	–	–	–	–
Buxbaum's sedge	CABU2	–	–	–	–	–	–	–	–	–	–	–	–
Cusick's sedge	CACU2	–	–	–	–	–	–	–	–	–	–	–	–
lesser panicled sedge	CADI2	–	–	33	20	–	–	–	–	–	–	–	–
woolly sedge	CALA3	–	–	–	–	–	–	–	Tr	–	–	–	–
slender sedge	CALA4	–	–	–	–	–	–	–	–	–	–	–	–
lenticular sedge	CALE5	–	–	–	–	38	Tr	–	Tr	–	–	19	Tr
mud sedge	CALI	–	–	50	11	–	–	–	–	–	–	–	–
black alpine sedge	CANI2	50	5	–	–	–	–	–	–	–	–	–	–
poor sedge	CAPA9	–	–	17	7	–	–	–	–	–	–	–	–
russet sedge	CASA2	–	–	–	–	–	–	–	–	–	–	–	–
Holm's sedge	CASCB	50	3	–	–	–	–	–	–	–	–	–	–
saw-leaved sedge	CASCP2	50	1	17	5	6	Tr	–	–	25	1	6	3
showy sedge	CASP	–	–	–	–	6	Tr	–	–	–	–	13	1
bladder sedge	CAUT	–	–	67	13	–	–	–	–	50	4	6	2
inflated sedge	CAVE	–	–	17	1	–	–	–	–	–	–	–	–
timber oatgrass	DAIN	100	24	–	–	–	–	–	–	–	–	–	–
few-flowered spike-rush	ELPA2	–	–	50	16	–	–	–	–	–	–	–	–
many-spiked cotton-grass	ERPO2	50	Tr	33	33	–	–	–	–	–	–	–	–
green-keeled cotton-grass	ERVI	–	–	17	7	–	–	–	–	–	–	–	–
tall mannagrass	GLEL	–	–	–	–	6	Tr	–	–	75	10	19	1
reed mannagrass	GLGR	–	–	–	–	–	–	–	–	25	65	–	–
Drummond's rush	JUDR	–	–	–	–	6	Tr	–	–	–	–	6	1
small-fruited bulrush	SCMI	–	–	–	–	13	Tr	100	1	25	Tr	13	3
Ferns and fern allies:													
common horsetail	EQAR	–	–	33	2	50	1	100	55	50	1	56	2

[a] CON = percentage of plots in which the species occurred.
[b] COV = average canopy cover in plots in which the species occurred.
[c] Tr = trace cover, less than 1 percent canopy cover.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: WWI Drumheller Spring Creek Park City/County: Spokane, Spokane Sampling Date: 5/15-6/03/2025

Applicant/Owner: D. Flynn on behalf of Condemned Companions State: _____ Sampling Point: UPL-1 N4.2 +3

Investigator(s): S. Collins & B. Kinard Section, Township, Range: Sec 1 T25N R42E

Landform (hillslope, terrace, etc.): hillslope Terrace Local relief (concave, convex, none): concave Slope (%): 15%

Subregion (LRR): Arid West Lat: 47.6273 N Long: _____ Datum: UTM NAD83 ZIN m(2m)

Soil Map Unit Name: Urban Northstar-Rock Outcrop 0-15% NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✓ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology ✓ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ✓

Are Vegetation _____, Soil _____, or Hydrology ✓ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	Is the Sampled Area within a Wetland? Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks: Urban Neighborhood. Please

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30x30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Ponderosa pine - Pinus ponderosa	70		
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 30x30')			
1. Common Snowberry	10		
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 30x30')			
1. Idaho fescue	10		
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	10 = Total Cover		
Woody Vine Stratum (Plot size: 30'x30')			
1.			
2.			
	100 = Total Cover		

% Bare Ground in Herb Stratum 10 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: N/A (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by: N/A
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

SOIL 713D-Urban land-North Star-Rock outcrop Complex 0-15% Slopes, Rocky Sampling Point: UPL-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-1"								CFPOM
								Extremely cobbly
								ashy loam
1-5"								Basalt Bedrock

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

Vernal Pools Area across the Street @ Ash Place.

HYDROLOGY

N/A

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (LRR A)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (LRR A)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Please see "Certified Wetland Report" + Attachments.

US Army Corps of Engineers

✓ S. Gilbo
ECOS USA
6/11/2025.

Western Mountains, Valleys, and Coast – Version 2.0

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: WH-3 Drumheller Springs Park City/County: Spokane, Spokane Sampling Date: 5/15, 6/03/2025

Applicant/Owner: D. Flynn on behalf of Conserve (Companies) State: WA Sampling Point: WH-3 Wet 1

Investigator(s): S. Collins Section, Township, Range: Sec. 01 T25N R42E

Landform (hillslope, terrace, etc.): 2nd riverine terrace Local relief (concave, none): none Slope (%): _____

Subregion (LRR): Arid West Scabland E Lat: 467198 N Long: 5281631 Datum: NAD83 UTM 11N (m)

Soil Map Unit Name: #3117 Northstar Rock Outcrop-Rock Complex, cobbly Nwl classification: Vernal Pool

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✓ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ✓

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	Is the Sampled Area within a Wetland? Yes ✓ No _____
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	

Remarks: Wetland Unit 3 is a Vernal Pool Area which is proposed to be disturbed by Construction of Townhouses @ Liberty/N. Ash Pl. Junction.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30'x30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 30'x30')			
1. Woods Rose	3	N	FACU
2.			
3.			
4.			
5.			
	3 = Total Cover		
Herb Stratum (Plot size: 30'x30')			
1. Camas (Camassia quamash)	40	Y	FACW
2. Wild Onion	5	N	FACU
3. Desert Parsley	5	N	FACU
4. Nuttall Desert Parsley	5	N	FACU
5. Bitterroot	5	N	FACU
6. Wild Celery	10	N	OBL
7. Cook Desert Parsley	5	N	OBL
8. Wild Carrot	5	N	FAC
Tufted Hairgrass (Deschampsia caespitosa)	85	Y	FACW
	= Total Cover		
Woody Vine Stratum (Plot size: 30'x30')			
1.			
2.			
	100 = Total Cover		

Basalt scabland mounds.

% Bare Ground in Herb Stratum 12% % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	2	x 1 =	2
FACW species	3	x 2 =	6
FAC species	1	x 3 =	3
FACU species	4	x 4 =	16
UPL species	0	x 5 =	0
Column Totals:	10 (A)		29 (B)

Prevalence Index = B/A = 3

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

✓ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:

Please see "Certified Wetland Report + ATTACHMENTS. "Camas Wet Meadow - Vernal Pool Area - WH-3".

US Army Corps of Engineers

VJ Collins #005 USA 4/10/2025

Arid West – Version 2.0

SOIL # 3117 Northstar-Rock Outcrop Rockly-Cocolalla 0-5% Slopes Sampling Point: WM-3 Wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-1								CFRom Biotic crust
1-3"	10YR3/2							Brown Silt Loam-Very Dark,
3"								Basalt Bedrock
								"Thin Dark Surface)

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- V Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) (except MLRA 1)
- ___ Loamy Gleyed Matrix (F2)
- V Depleted Matrix (F3) (Restrictive Layer Basalt)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
Type: Basalt Bedrock
Depth (inches): 0-3"

Hydric Soil Present? Yes V No ___

Remarks:
2nd riverine Basalt Terrace Spokane River. Scabland-Vernal Pools Area WM3.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- V Surface Water (A1)
- ___ High Water Table (A2)
- V Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- V Algal Mat or Crust (B4) Biotic Crust
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- V Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) (LRR A)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- V Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- V Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (LRR A)
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes V No ___ Depth (inches): 0-1"
Water Table Present? Yes V No ___ Depth (inches): 0-1"
Saturation Present? (includes capillary fringe) Yes V No ___ Depth (inches): 0-1"

Wetland Hydrology Present? Yes V No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Please Certified Wetland Report + Attachments 3.

11. Columbia sedge (*Carex aperta*) ≥25 percent canopy coverage or dominant ..... **Columbia sedge (CAAP3) association**

12. Water sedge (*Carex aquatilis* var. *aquatilis*) and/or Sitka sedge (*Carex aquatilis* var. *sitchensis*) ≥25 percent canopy coverage or dominant ..... **Water sedge (CAAQ) association**

13. Mud sedge (*Carex limosa*) and/or poor sedge (*Carex paupercula*) ≥25 percent canopy coverage or dominant ..... **Mud sedge (CALI) association**

14. Slender sedge (*Carex lasiocarpa*) and/or Buxbaum's sedge (*Carex buxbaumii*) ≥25 percent canopy coverage or dominant ..... **Slender sedge (CALA4) association**

15. Lenticular sedge (*Carex lenticularis*) ≥25 percent canopy coverage or dominant ..... **Lenticular sedge (CALE5) association**

Key to the Nonsedge Plant Associations

1. Creeping spike-rush (*Eleocharis palustris*) ≥25 percent canopy coverage or dominant ..... **Go to the key to the AQUATIC series or creeping spike-rush (ELPA) association**

2. Few-flowered spike-rush (*Eleocharis pauciflora*) ≥25 percent canopy coverage or dominant ..... **Few-flowered spike-rush (ELPA2) association**

3. Cotton-grass species (*Eriophorum* spp.), individually or in combination, ≥10 percent canopy coverage ..... **Many-spiked cotton-grass (ERPO2) association**

4. Small-fruited bulrush (*Scirpus microcarpus*) ≥25 percent canopy coverage or dominant ..... **Small-fruited bulrush (SCMI) association**

5. Tall mannagrass (*Glyceria elata*) and/or reed mannagrass (*G. grandis*) ≥25 percent canopy coverage or dominant ..... **Tall mannagrass (GLEL) association**

Wet Meadow Camas

6. Bluejoint reedgrass (*Calamagrostis canadensis*) ≥25 percent canopy coverage or dominant ..... **Bluejoint reedgrass (CACA) association**

7. Tufted hairgrass (*Deschampsia cespitosa*) ≥25 percent canopy coverage or dominant ..... **Tufted hairgrass (DECE) association**

8. Timber oatgrass (*Danthonia intermedia*) ≥25 percent canopy coverage or dominant (plots with abundant but hidden, minute, *Ericaceous* shrubs should stay here) ..... **Timber oatgrass (DAIN) association**

9. Sheep fescue (*Festuca ovina* var. *rybergii)* ≥25 percent canopy coverage or dominant (plots with abundant but hidden, minute, *Ericaceous* shrubs should stay here) ..... **Sheep fescue (FEOVR) association**

10. Introduced or increaser grasses such as Kentucky bluegrass (*Poa pratensis*), reed canarygrass (*Phalaris arundinacea*), redtop (*Agrostis alba*), or Oregon bentgrass (*Agrostis oregonensis*) ≥25 percent canopy coverage or dominant ..... **POPR community type**

✓ S. Gallo
ECOS USA
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