

RELATIONSHIPS TO OTHER CLASSIFICATIONS

Kovalchik (1992c) described many of the plant associations in the MEADOW series in the draft classification for northeastern Washington. MEADOW associations and community types are described throughout North America. Classifications in and near the study area include those in eastern Washington, northern Idaho, and Montana (Crawford 2003; Hansen et al. 1988, 1995; Kovalchik 1992c); central and northeastern Oregon (Crowe and Clausnitzer 1997, Kovalchik 1987); and Idaho, Utah, and Nevada (Manning and Padgett 1995; Padgett et al. 1989; Youngblood et al. 1985a, 1985b).

U.S. DEPARTMENT OF THE INTERIOR, FISH AND WILDLIFE SERVICE WETLANDS CLASSIFICATION

Owing to its variability, the classification will vary according to the MEADOW plant association and flood regime. It is possible for individual associations to belong to different wetland classification classes, depending on the size of the water body and the flood regime. Most of the wettest associations belong to the system palustrine; class, emergent wetland; subclass, persistent; water regime, (nontidal) temporarily saturated to semipermanently flooded.

KEY TO THE MEADOW PLANT ASSOCIATIONS

1. Aquatic sites on the edges of lakes or ponds or in sluggish streams, usually with standing water for all or much of the growing season, potential vegetation with species such as NUPO, POTAM, POAM2, SCVA, SPARG, GLBO, EQFL, TYLA, ELPA, or PUPAM with combined canopy coverage of at least 25 percent or dominant Go to "Key to the Aquatic Plant Associations" (p. 238)
2. Potential vegetation dominated by sedge (*Carex* spp.) with combined canopy coverage of at least 25 percent or dominant and *Eriophorum* and *Eleocharis* spp. <25 percent "Key to the Sedge Plant Associations" (below)
- ✓ 3. Sedge species with a combined canopy coverage of <25 percent or not dominant "Key to the Nonsedge Plant Associations" (below)

Key to the Sedge (*Carex*) Plant Associations

1. Russet sedge (*Carex saxatilis*) ≥25 percent canopy coverage or dominant Russet sedge (CASA2) association
2. Saw-leaved sedge (*Carex scopulorum* var. *prionophylla*) ≥25 percent canopy coverage or dominant Saw-leaved sedge (CASC2) association
3. Holm's sedge (*Carex scopulorum* var. *bracteosa*) ≥25 percent canopy coverage or dominant Holm's sedge (CASC2) association
4. Showy sedge (*Carex spectabilis*) ≥25 percent canopy coverage or dominant Showy sedge (CASP) association
5. Sheep sedge (*Carex illota*) ≥25 percent canopy coverage or dominant Sheep sedge (CAIL) association
6. Black alpine sedge (*Carex nigricans*) ≥25 percent canopy coverage or dominant (plots with hidden, minute, *Ericaceous* shrubs should stay here) Black alpine sedge (CANI2) association
7. Cusick's sedge (*Carex cusickii*) ≥25 percent canopy coverage or dominant Cusick's sedge (CACU2) association
8. Beaked sedge (*Carex rostrata*) ≥25 percent canopy coverage or dominant Beaked sedge (CARO2) association
9. Bladder sedge (*Carex utriculata*) and/or awned sedge (*Carex atherodes*) ≥25 percent canopy coverage or dominant Bladder sedge (CAUT) association
10. Inflated sedge (*Carex vesicaria*) ≥25 percent canopy coverage or dominant Inflated sedge (CAVE) association

✓ J. G. H.
6/17/2025

HERBACEOUS SERIES

Table 24—Constancy and mean cover of important plant species in the MEADOW plant associations—Part 1

Species	Code	CACA 12 plots		DAIN 5 plots		DECE 4 plots		ELPA2 13 plots		ERPO2 19 plots		FEOVR 2 plots	
		CON ^a	COV ^b	CON	COV	CON	COV	CON	COV	CON	COV	CON	COV
Tree understory:													
subalpine fir	ABLA2	17	2	40	8	—	—	15	Tr ^c	32	1	—	—
Engelmann spruce	PIEN	17	1	40	4	25	Tr	23	1	32	1	—	—
lodgepole pine	PICO	8	Tr	20	4	25	Tr	23	1	11	3	50	Tr
Shrubs:													
mountain alder	ALIN	25	6	—	—	—	—	—	—	11	3	—	—
red-osier dogwood	COST	25	Tr	—	—	—	—	—	—	—	—	—	—
Low shrubs and subshrubs:													
red mountain-heath	PHEM	8	15	40	5	—	—	—	—	16	1	—	—
Farr's willow	SAFA	—	—	60	7	—	—	31	2	5	Tr	—	—
tea-leaved willow	SAPLM2	—	—	—	—	—	—	8	Tr	5	8	50	15
dwarf huckleberry	VACA	8	20	100	10	—	—	8	Tr	11	Tr	100	25
Perennial forbs:													
western yarrow	ACMI	33	1	20	3	75	2	—	—	—	—	50	1
woolly pussytoes	ANLA	8	2	40	1	—	—	—	—	—	—	50	5
umber pussytoes	ANUM	8	2	60	5	—	—	—	—	—	—	—	—
fewflower aster	ASMO	17	31	—	—	—	—	8	Tr	5	Tr	—	—
western aster	ASOC	17	1	—	—	50	15	—	—	—	—	—	—
aster species	ASTER	25	2	80	2	—	—	15	3	16	3	—	—
twinflower marshmarigold	CABI	17	5	—	—	—	—	31	2	21	3	—	—
alpine willow-weed	EPAL	—	—	20	Tr	25	Tr	8	1	11	Tr	—	—
smooth willow-weed	EPGL	—	—	—	—	—	—	—	—	5	Tr	—	—
Watson's willow-weed	EPWA	8	2	—	—	50	1	—	—	—	—	—	—
peregrine fleabane	ERPE	8	3	20	Tr	25	1	—	—	—	—	—	—
broadpetal strawberry	FRVIP	8	2	—	—	50	1	8	Tr	5	1	50	5
small bedstraw	GATR	42	2	—	—	75	1	8	Tr	—	—	—	—
largeleaf avens	GEMA	50	2	—	—	50	1	—	—	—	—	50	1
partridgefoot	LUPE	—	—	20	Tr	—	—	—	—	—	—	—	—
broadleaf lupine	LULA	—	—	40	Tr	—	—	—	—	—	—	—	—
common bogbean	METR	—	—	—	—	—	—	8	2	11	6	—	—
elephanthead pedicularis	PEGR	17	3	40	1	—	—	62	2	47	2	—	—
fanleaf cinquefoil	POFL2	8	15	80	4	—	—	31	Tr	16	1	50	3
✓ marsh cinquefoil	POPA3	17	5	—	—	—	—	8	3	11	3	—	—
scheuchzeria	SCPA	—	—	—	—	—	—	8	3	—	—	—	—
clefleaf groundsel	SECY	—	—	20	5	—	—	8	1	11	4	—	—
arrowleaf groundsel	SETR	17	18	—	—	25	Tr	—	—	16	2	—	—
Canada goldenrod	SOCA	8	77	—	—	25	15	8	2	—	—	—	—
ladies-tresses	SPRO	—	—	20	1	—	—	38	Tr	11	Tr	—	—
Cooley's hedge-nettle	STCO4	8	48	—	—	—	—	—	—	—	—	—	—
globeflower	TRLA4	—	—	20	Tr	—	—	8	Tr	11	8	—	—
Sitka valerian	VASI	8	3	20	Tr	—	—	—	—	5	1	—	—
American false hellebore	VEVI	8	8	—	—	—	—	—	—	16	Tr	—	—
thyme-leaved speedwell	VESE	—	—	20	3	50	Tr	—	—	—	—	—	—
Wormskjold's speedwell	VEWO	17	1	20	2	—	—	15	1	11	1	—	—
pioneer violet	VIGL	17	26	—	—	—	—	8	Tr	—	—	—	—
Grasses or grasslike:													
redtop	AGAL	17	20	—	—	—	—	—	—	5	2	—	—
Oregon bentgrass	AGOR	8	1	—	—	—	—	8	5	—	—	—	—
Thurber's bentgrass	AGTH	—	—	—	—	—	—	15	1	21	1	—	—
bluejoint reedgrass	CACA	100	60	60	4	25	Tr	38	1	32	1	—	—
Columbia sedge	CAAP3	8	10	—	—	—	—	—	—	—	—	—	—
water sedge	CAAQA	8	Tr	—	—	—	—	8	5	—	—	—	—
Sitka sedge	CAAQS	8	Tr	—	—	—	—	8	7	5	3	—	—
awned sedge	CAAT2	8	Tr	—	—	—	—	—	—	—	—	—	—
slender-beaked sedge	CAAT	8	1	—	—	75	4	—	—	—	—	—	—
Buxbaum's sedge	CABU2	—	—	—	—	—	—	15	11	5	60	—	—
gray sedge	CACA4	8	3	—	—	—	—	—	—	11	Tr	—	—
Cusick's sedge	CACU2	—	—	—	—	—	—	—	—	—	—	—	—
lesser panicled sedge	CADI2	—	—	—	—	—	—	—	—	5	3	—	—
sheep sedge	CAIL	—	—	20	Tr	—	—	8	Tr	21	4	—	—
slender sedge	CALA4	—	—	—	—	—	—	15	3	—	—	—	—
tufted sedge	CALE5	8	1	20	Tr	25	Tr	23	1	11	Tr	—	—
mud sedge	CALI	—	—	—	—	—	—	23	1	11	6	—	—
black alpine sedge	CANI2	—	—	40	4	—	—	8	Tr	26	7	—	—
thick-headed sedge	CAPA	25	2	40	2	50	4	15	2	—	—	100	6
beaked sedge	CARO2	—	—	—	—	—	—	—	—	—	—	—	—
russet sedge	CASA2	—	—	20	2	—	—	15	9	5	Tr	—	—

✓ S. G. L.
 & DOS 4576 6/17/2015

Table 24—Constancy and mean cover of important plant species in the MEADOW plant associations—Part 1 (continued)

Species	Code	CACAP 12 plots		DAIN 5 plots		DECE 4 plots		ELPA2 13 plots		ERPO2 19 plots		FEOVR 2 plots	
		CON	COV	CON	COV	CON	COV	CON	COV	CON	COV	CON	COV
Holm's sedge	CASCB	8	Tr	—	—	25	8	23	5	37	9	—	—
saw-leaved sedge	CASCP2	17	2	60	Tr	—	—	31	10	37	6	50	2
showy sedge	CASP	—	—	20	Tr	—	—	—	—	16	5	—	—
bladder sedge	CAUT	33	3	—	—	50	11	31	5	37	4	—	—
inflated sedge	CAVE	17	2	—	—	—	—	—	—	—	—	—	—
timber oatgrass	DAIN	—	—	100	34	25	Tr	31	2	—	—	100	5
tufted hairgrass	DECE	17	8	—	—	100	54	8	1	—	—	—	—
creeping spike-rush	ELPA	—	—	—	—	—	—	—	—	—	—	—	—
few-flowered spike-rush	ELPA2	—	—	—	—	—	—	100	55	47	7	—	—
Chamisso cotton-grass	ERCH2	—	—	—	—	—	—	—	—	5	40	—	—
slender cotton-grass	ERGR8	—	—	—	—	—	—	—	—	—	—	—	—
many-spiked cotton-grass	ERPO2	8	Tr	—	—	—	—	46	8	84	33	—	—
green-keeled cotton-grass	ERVI	—	—	20	3	—	—	38	13	11	40	—	—
sheep fescue	FEOVR	—	—	—	—	—	—	—	—	—	—	100	43
green fescue	FEVI	—	—	60	6	—	—	—	—	—	—	—	—
tall mannagrass	GLEL	33	3	—	—	—	—	—	—	—	—	—	—
reed mannagrass	GLGR	—	—	—	—	—	—	—	—	—	—	—	—
fowl mannagrass	GLST	—	—	—	—	—	—	8	2	—	—	—	—
Baltic rush	JUBA	8	1	—	—	25	7	—	—	—	—	—	—
Drummond's rush	JUDR	—	—	40	Tr	—	—	—	—	—	—	—	—
Reed canarygrass	PHAR	—	—	—	—	—	—	—	—	—	—	—	—
Kentucky bluegrass	POPR	17	1	—	—	75	1	—	—	—	—	—	—
small-fruited bulrush	SCMI	8	20	—	—	—	—	—	—	—	—	—	—
spike trisetum	TRSP	—	—	40	8	25	Tr	—	—	—	—	100	4
Ferns and fern allies:													
common horsetail	EQAR	33	3	40	Tr	—	—	15	1	26	3	—	—
water horsetail	EQFL	—	—	—	—	—	—	—	—	11	1	—	—

^aCON = percentage of plots in which the species occurred.^bCOV = average canopy cover in plots in which the species occurred.^cTr = trace cover, less than 1 percent canopy cover.

Table 24—Constancy and mean cover of important plant species in the MEADOW plant associations—Part 2

Species	Code	GLEL 4 plots		POPR 5 plots		SCMI 6 plots		CAAP3 2 plots		CAAQ 11 plots		CACU2-WA 4 plots	
		CON ^a	COV ^b	CON	COV	CON	COV	CON	COV	CON	COV	CON	COV
Tree understory:													
subalpine fir	ABLA2	—	—	—	—	—	—	—	—	—	—	—	—
Engelmann spruce	PIEN	—	—	—	—	—	—	—	—	9	Tr	25	Tr ^c
lodgepole pine	PICO	—	—	—	—	—	—	—	—	9	Tr	—	—
Shrubs:													
mountain alder	ALIN	50	6	—	—	50	4	—	—	18	1	75	10
red-osier dogwood	COST	50	Tr	40	2	17	Tr	—	—	9	1	25	2
Low shrubs and subshrubs:													
red mountain-heath	PHEM	—	—	—	—	—	—	—	—	—	—	—	—
Farr's willow	SAFA	—	—	—	—	—	—	—	—	9	7	—	—
tea-leaved willow	SAPLM2	—	—	—	—	—	—	—	—	9	2	—	—
dwarf huckleberry	VACA	—	—	—	—	—	—	—	—	—	—	—	—
Perennial forbs:													
western yarrow	ACMI	—	—	40	1	—	—	—	—	9	Tr	—	—
woolly pussytoes	ANLA	—	—	—	—	—	—	—	—	—	—	—	—
umber pussytoes	ANUM	—	—	—	—	—	—	—	—	—	—	—	—
fewflower aster	ASMO	50	2	—	—	—	—	—	—	—	—	—	—
western aster	ASOC	25	Tr	—	—	17	Tr	—	—	—	—	—	—
aster species	ASTER	—	—	—	—	—	—	—	—	—	—	25	1
twinflower marshmarigold	CABI	—	—	—	—	—	—	—	—	—	—	—	—
alpine willow-weed	EPAL	—	—	—	—	—	—	—	—	—	—	—	—
smooth willow-weed	EPGL	25	7	—	—	50	1	—	—	—	—	—	—
Watson's willow-weed	EPWA	50	11	20	3	—	—	—	—	9	Tr	—	—
peregrine fleabane	ERPE	—	—	—	—	—	—	—	—	—	—	—	—
broadpetal strawberry	FRVIP	—	—	40	4	—	—	—	—	—	—	25	Tr
small bedstraw	GATR	75	3	—	—	17	15	—	—	27	1	25	2
largeleaf avens	GEMA	75	2	20	1	17	Tr	—	—	27	1	25	Tr
partridgefoot	LUPE	—	—	—	—	—	—	—	—	—	—	—	—
broadleaf lupine	LULA	—	—	—	—	—	—	—	—	—	—	—	—

J.S. Geller EOS USA
6/17/2025

WETLANDS AND DEEPWATER HABITATS CLASSIFICATION

Drumheller Springs Park/Conservation Area Drumheller Springs Creek Type N waterbody.

System

M-Marine

Subsystem

1 - Subtidal

2 - Intertidal

Class

US - Unconsolidated Shore

RS - Rocky Shore

RF - Reef

AB - Aquatic Bed

RF - Reef

AB - Aquatic Bed

UB - Unconsolidated Bottom

RB - Rock Bottom

Subclass

1 Cobble-Gravel
2 Sand
3 Mud
4 Organic

1 Bedrock
2 Rubble

1 Coral
2 Worm

1 Algal
2 Rotted Vascular

1 Coral
2 Worm

1 Algal
2 Rotted Vascular
3 Floating Vascular

1 Cobble-Gravel
2 Sand
3 Mud

1 Bedrock
2 Rubble

System

E - Estuarine

Subsystem

1 - Subtidal

2 - Intertidal

Class

RB - Rock Bottom

UB - Unconsolidated Bottom

AB - Aquatic Bed

RF - Reef

AB - Aquatic Bed

RS - Rocky Shore

US - Unconsolidated Shore

SS - Scrub-Shrub

FO - Forested

Subclass

1 Bedrock
2 Rubble

1 Algal
2 Rotted Vascular
3 Floating Vascular

1 Algal
2 Rotted Vascular
3 Floating Vascular

2 Mollusk
3 Worm

1 Bedrock
2 Rubble

1 Cobble-Gravel
2 Sand
3 Mud
4 Organic

1 Perennial
2 Non-perennial
3 Phragmites australis

1 Broad-Leaved Deciduous
2 Needle-Leaved Deciduous
3 Broad-Leaved Evergreen
4 Needle-Leaved Evergreen
5 Dead
6 Deciduous
7 Evergreen

System

✓ R-Riverine WU-1 R4RBI

Subsystem

1 - Tidal

2 - Lower Perennial

3 - Upper Perennial

4 - Intermittent

5 - Unknown Perennial

6 - Intermittent

7 - Unknown Perennial

Class

RB - Rock Bottom

UB - Unconsolidated Bottom

AB - Aquatic Bed

RS - Rocky Shore

US - Unconsolidated Shore

EM - Emergent

EM - Emergent

Subclass

1 Bedrock
2 Rubble

1 Cobble-Gravel
2 Sand
3 Mud
4 Organic

1 Algal
2 Rotted Vascular
3 Floating Vascular

1 Algal
2 Rotted Vascular
3 Floating Vascular

1 Bedrock
2 Rubble

1 Cobble-Gravel
2 Sand
3 Mud
4 Organic
5 Vegetated

1 Nonperennial
2 Nonperennial

* Intermittent is limited to the Streambed Class
** Unknown Perennial is limited to Unconsolidated Bottom
*** Streambed is limited to Tidal and Intermittent Subsystems

✓ S. G. P. H. L.
2005 USA
6/10/2025

Hydroperiods

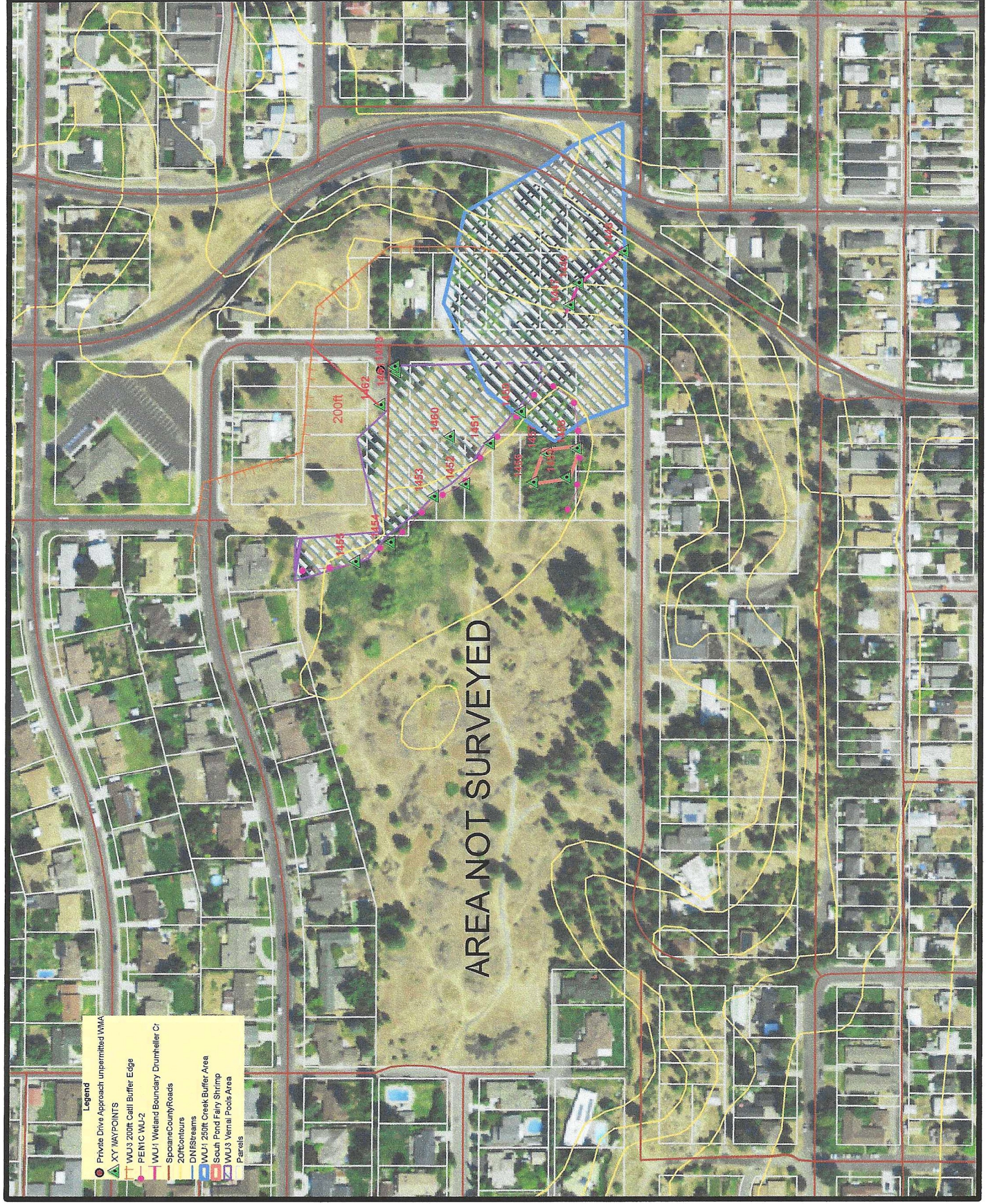
Climatological Data for SPOKANE INTERNATIONAL AIRPORT, WA - May 2025									
Date	Temperature				HDD	CDD	Precipitation	New Snow	Snow Depth
	Maximum	Minimum	Average	Departure					
2025-05-01	72	44	58.0	6.6	7	0	0.00	0.0	0
2025-05-02	80	48	64.0	12.3	1	0	0.00	0.0	0
2025-05-03	63	44	53.5	1.4	11	0	T	0.0	0
2025-05-04	60	36	48.0	-4.4	17	0	0.00	0.0	0
2025-05-05	66	36	51.0	-1.8	14	0	0.00	0.0	0
2025-05-06	72	41	56.5	3.4	8	0	0.00	0.0	0
2025-05-07	75	49	62.0	8.5	3	0	T	0.0	0
2025-05-08	65	45	55.0	1.2	10	0	T	0.0	0
2025-05-09	75	42	58.5	4.3	6	0	0.00	0.0	0
2025-05-10	78	51	64.5	10.0	0	0	0.00	0.0	0
2025-05-11	60	46	53.0	-1.8	12	0	0.31	0.0	0
2025-05-12	62	43	52.5	-2.7	12	0	T	0.0	0
2025-05-13	60	46	53.0	-2.5	12	0	0.01	0.0	0
2025-05-14	63	47	55.0	-0.8	10	0	0.03	0.0	0
2025-05-15	62	42	52.0	-4.1	13	0	T	0.0	0
2025-05-16	52	44	48.0	-8.4	17	0	0.11	0.0	0
2025-05-17	63	45	54.0	-2.6	11	0	0.14	0.0	0
2025-05-18	53	42	47.5	-9.4	17	0	0.10	0.0	0
2025-05-19	54	38	46.0	-11.2	19	0	0.17	0.0	0
2025-05-20	59	42	50.5	-6.9	14	0	0.00	0.0	0
2025-05-21	62	40	51.0	-6.6	14	0	0.00	0.0	0
2025-05-22	56	46	51.0	-6.9	14	0	0.06	0.0	0
2025-05-23	67	44	55.5	-2.6	9	0	0.00	0.0	0
2025-05-24	75	48	61.5	3.2	3	0	0.00	0.0	0
2025-05-25	85	54	69.5	11.0	0	5	0.00	0.0	0
2025-05-26	72	55	63.5	4.8	1	0	T	0.0	0
2025-05-27	73	46	59.5	0.7	5	0	0.00	0.0	0
2025-05-28	88	54	71.0	12.0	0	6	0.00	0.0	0
2025-05-29	76	55	65.5	6.3	0	1	0.01	0.0	0
2025-05-30	79	47	63.0	3.7	2	0	0.00	0.0	0
2025-05-31	86	54	70.0	10.5	0	5	0.00	0.0	0
Sum	2113	1414	-	-	262	17	0.94	0.0	-
Average	68.2	45.6	56.9	0.9	-	-	-	-	0.0
Normal	67.1	44.9	56.0	-	294	15	1.55	0.1	-

Observations for each day cover the 24 hours ending at the time given below (Local Standard Time).
Max Temperature : midnight
Min Temperature : midnight
Precipitation : midnight
Snowfall : midnight
Snow Depth : 4am

Below Average by .61 "

✓ 5.66hs
KLOS USA
6/11/2025

E. Drumheller Springs Park and Conservaton Area Wetland Boundaries and Buffers Map 06_09_2025



xy GPS waypoints ECOS USA WETLAND SURVEY 6/03/2025

Drumheller Springs Conservation Area and Drumheller Springs C/O Denise Flynn

City of Spokane, Spokane Co. WA.

Parcel #s 25014.3135, 25014.2203-2207-2209, 25014.2201, 25014.4609

FID	Shape*	Id	Waypoint	Northing	Eastings	Gradient%	Elev (m)	Desc
✓ 1	Point	0	1447	✓ 5281562	467273	18	18	588 WU-1 WB1 DHSC Type N Waterbody <i>Soil Pit-Wet</i>
✓ 2	Point	0	1448	5281531	467305	18	18	586 DHSC Start @ Stormwater Drain
✓ 3	Point	0	1449	5281557	467286	29-51% F1		590 DHSC at spring pipe outlet. Water temperature 51degrees F.
✓ 4	Point	0	1450	✓ 5281590	467212	2	2	592 WU-2 PEM1C WB <i>✓ Soil Pit-Wet</i>
✓ 5	Point	0	1451	5281608	467194	2	2	592 WU-2 PEM1C WB
✓ 6	Point	0	1452	5281622	467170	2	2	591 WU-2 PEM1C WB
✓ 7	Point	0	1453	5281640	467163	2	2	592 WU-2 PEM1C WB
✓ 8	Point	0	1454	5281665	467136	3	3	594 WU-2 PEM1C WB
✓ 9	Point	0	1455	5281685	467125	0	0	592 WU-2 PEM1C WB
✓ 10	Point	0	1456	✓ 5281583	467171	0	0	583 WU-2 PEM1C South Wetland Pond 1
✓ 11	Point	0	1457	5281575	467188	0	0	589 WU-2 PEM1C South Wetland Pond 2
✓ 12	Point	0	1458	5281558	467191	0	0	591 WU-2 PEM1C South Wetland Pond 3
✓ 13	Point	0	1459	5281564	467174	0	0	593 WU-2 PEM1C South Wetland Pond 3
✓ 14	Point	0	1460	✓ 5281631	467198	0	✓ 0	591 WU-3 T-1 Vernal Camas Meadow (Westside) <i>Soil Pit-Wet</i>
✓ 15	Point	0	1461	5281662	467235	0	✓ 0	596 WU-3 T-1 Vernal Pool Camas Wet Meadow <i>WU-1 Soil Pit</i>
✓ 16	Point	0	1462	✓ 5281671	467216	0	0	593 W Dalton Street @ PDA & N. BNDRY Drumheller property
17	Point	0	1463	✓ 5281663	467238	0	0	594 PDA Dalton proposed project Parcels 25014.2107-2109 F2

Legend

WB	Wetland Boundary
DHSC	Drumheller Springs Creek
Type N	Intermittent/Seasonal Creek
WMA	Wetland Mitigation Area
PEM1C	Palustrine Emergent Persistent Seasonally Flooded
PDA	Private Drive Approach

Notes:

F1 The instream gradient at the springs was 29% and then 51% top of terrace along Ash Drive.

F2 There is a nonpermitted private drive approach which has damaged and impacted the WU-3 Vernal Pool Wet Meadow.

There are native wetland plant species including Common Camas, Bitterroot, Indian Celery, Wild Onion, 25014.2107-2109, and Lomatium Dissectum on these 3 parcels and are also considered Vernal pools based on special characteristics.

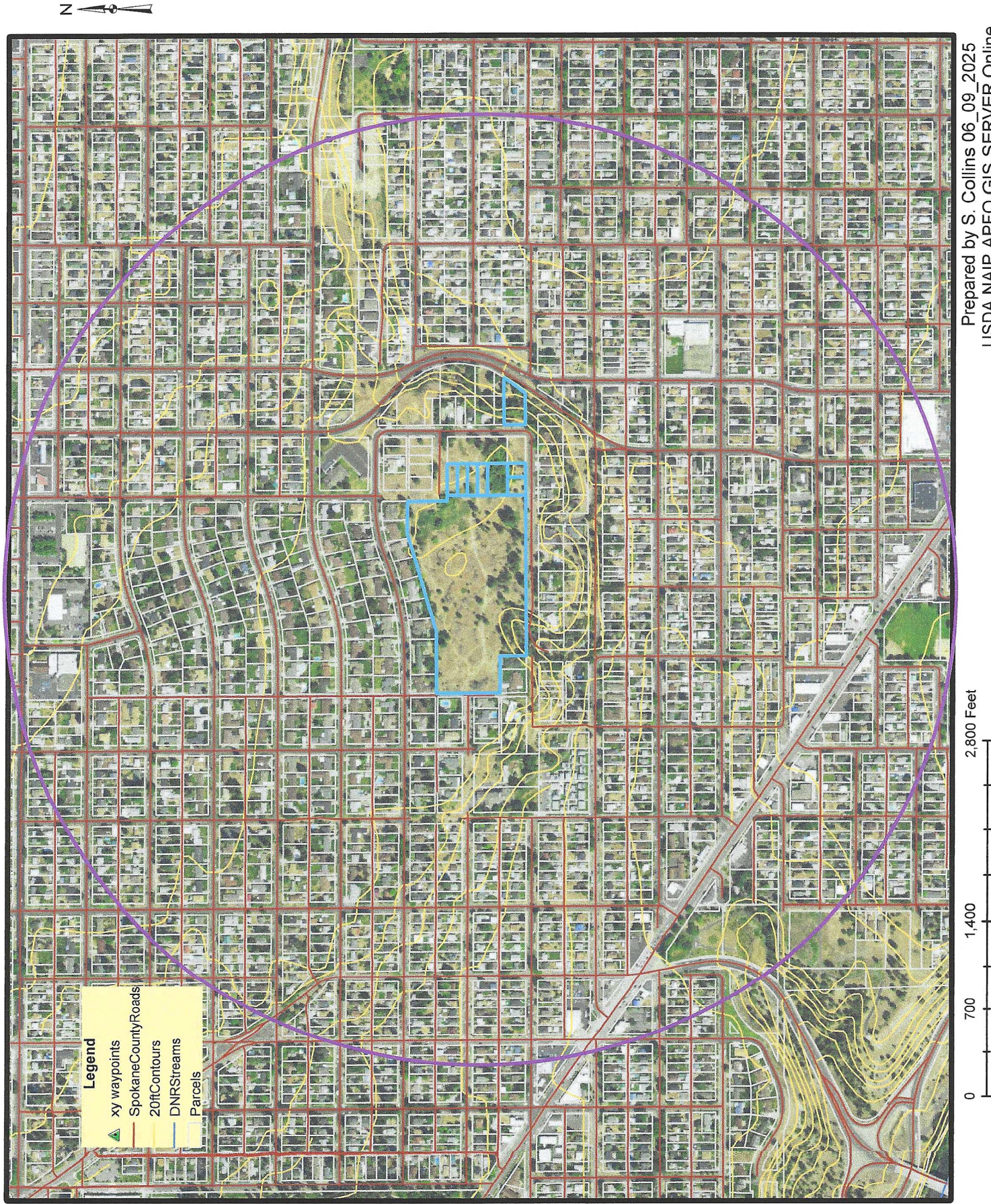
GPS coordinates and xy waypoints from Garmin etrex 20X (2m)

Scollins DBA ECOS USA Wetland Site Survey onsite June 3, 2025.

Excel Sheet prepared by: S. Collins 6/05/2025.

Sonnysalmon9@gmail.com

1KM Aerial Map Drummheller Springs Parks and Conservation Area City of Spokane





Priority Habitats and Species on the Web



Report Date: 05/28/2025

User Comments/Notes:

Drumheller Springs Park and Conservation Area City of Spokane Spokane County, WA

✓ S. Gills
ECO3 USA
5/28/2025

PHS Species/Habitats Overview:

Occurrence Name	Federal Status	State Status	Sensitive Location
Shrubsteppe	N/A	N/A	No
Big brown bat			Yes
Townsend's Big-eared Bat		Candidate	Yes

PHS Species/Habitats Details:

Shrubsteppe	
Priority Area	Habitat Feature
Site Name	Spokane County Presumptive Shrubsteppe
Accuracy	NA
Notes	General location of Shrubsteppe. Confirm or refute with site-scale info. WDFW recommends using site-scale info to inform site-scale land use decisions. Expect that on-the-ground conditions (e.g., boundaries) will vary from the map.
Source Record	920846
Source Name	Keith Folkerts, WDFW
Source Entity	WA Dept. of Fish and Wildlife
Federal Status	N/A
State Status	N/A
PHS Listing Status	PHS LISTED OCCURRENCE
Sensitive	N
SGCN	N
Display Resolution	AS MAPPED
Geometry Type	Polygons

Shrubsteppe	
Priority Area	Habitat Feature
Site Name	Spokane County Presumptive Shrubsteppe
Accuracy	NA
Notes	General location of Shrubsteppe. Confirm or refute with site-scale info. WDFW recommends using site-scale info to inform site-scale land use decisions. Expect that on-the-ground conditions (e.g., boundaries) will vary from the map.
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State Status	N/A
PHS Listing Status	PHS LISTED OCCURRENCE
Sensitive	N
SGCN	N
Display Resolution	AS MAPPED
Geometry Type	Polygons

Big brown bat	
Scientific Name	<i>Eptesicus fuscus</i>
Notes	This polygon mask represents one or more records of the above species or habitat occurrence. Contact PHS Data Release at phsproducts@dfw.wa.gov for obtaining information about masked sensitive species and habitats.
PHS Listing Status	PHS Listed Occurrence
Sensitive	Y
Display Resolution	TOWNSHIP
ManagementRecommendations	http://wdfw.wa.gov/publications/pub.php?id=00605

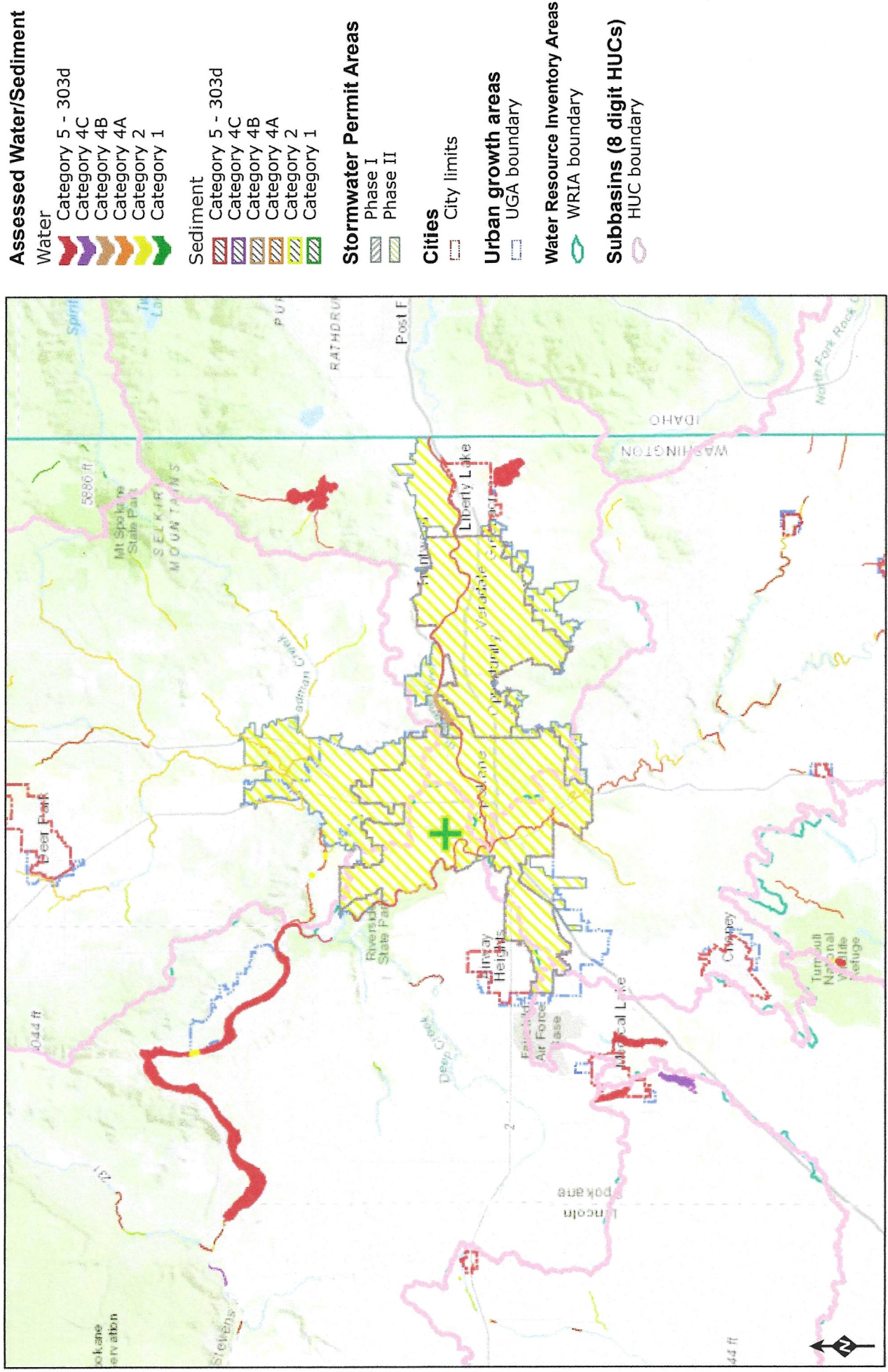
Townsend's Big-eared Bat	
Scientific Name	<i>Corynorhinus townsendii</i>
Notes	This polygon mask represents one or more records of the above species or habitat occurrence. Contact PHS Data Release at phsproducts@dfw.wa.gov for obtaining information about masked sensitive species and habitats.
State Status	Candidate
PHS Listing Status	PHS Listed Occurrence
Sensitive	Y
SGCN	Y
Display Resolution	TOWNSHIP
ManagementRecommendations	http://wdfw.wa.gov/publications/pub.php?id=00027

DISCLAIMER. This report includes information that the Washington Department of Fish and Wildlife (WDFW) maintains in a central computer database. It is not an attempt to provide you with an official agency response as to the impacts of your project on fish and wildlife. This information only documents the location of fish and wildlife resources to the best of our knowledge. It is not a complete inventory and it is important to note that fish and wildlife resources may occur in areas not currently known to WDFW biologists, or in areas for which comprehensive surveys have not been conducted. Site specific surveys are frequently necessary to rule out the presence of priority resources. Locations of fish and wildlife resources are subject to variation caused by disturbance, changes in season and weather, and other factors. WDFW does not recommend using reports more than six months old.

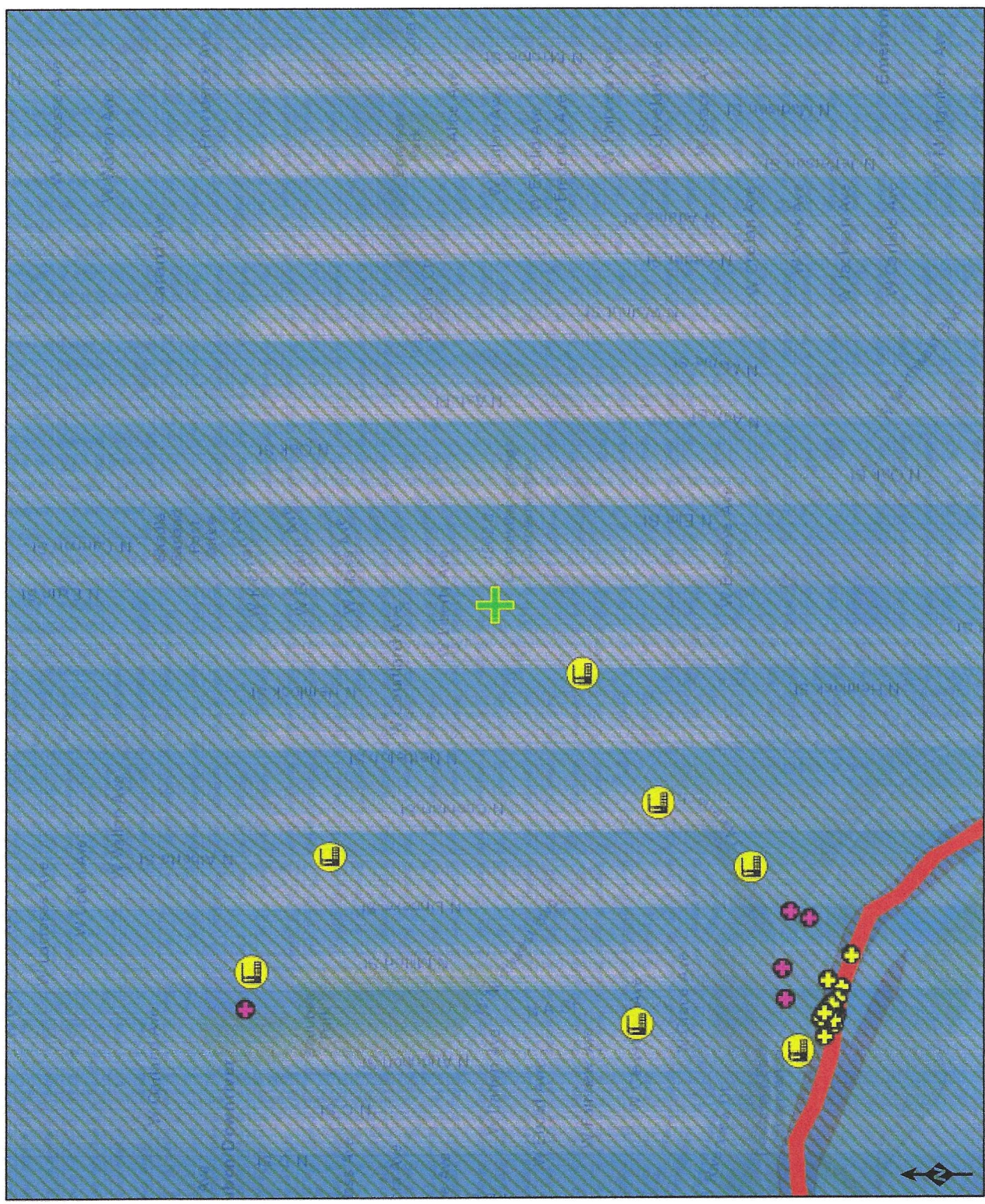
Shrubsteppe	
Priority Area	Habitat Feature
Site Name	Spokane County Presumptive Shrubsteppe
Accuracy	NA
Notes	General location of Shrubsteppe. Confirm or refute with site-scale info. WDFW recommends using site-scale info to inform site-scale land use decisions. Expect that on-the-ground conditions (e.g., boundaries) will vary from the map.
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Federal Status	N/A
State Status	N/A
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Sensitive	N
SGCN	N
Display Resolution	AS MAPPED
Geometry Type	Polygons

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Source Entity	WA Dept. of Fish and Wildlife
Federal Status	N/A
State Status	N/A
PHS Listing Status	PHS LISTED OCCURRENCE
Sensitive	N
SGCN	N
Display Resolution	AS MAPPED
Geometry Type	Polygons

Map of Subbasin Drumheller Springs Park and Conservation Area City of Spokane.



Map of Site Drumheller Springs Park and Conservation Area City of Spokane.



- WQ Permitted Outfalls**

 - Outfall - Groundwater
 - Outfall - Surface Water
 - Outfall - Other
 - Associated Facility
- Assessed Water/Sediment**

Water

 - Category 5 - 303d
 - Category 4C
 - Category 4B
 - Category 4A
 - Category 2
 - Category 1

Sediment

 - Category 5 - 303d
 - Category 4C
 - Category 4B
 - Category 4A
 - Category 2
 - Category 1
- WQ Improvement Projects**

 - TMDL - Approved
 - 4B - Approved
 - STI - Approved
 - ARP - Approved
 - TMDL - In Development
 - STI - In Development
 - ARP - In Development
- Stormwater Permit Areas**

 - Phase I
 - Phase II



Map of Site Drumbeller Springs Park and Conservation Area City of Spokane.

