

SITE: JRWS\_A22 SPRING CREEK  
SITE REPORT  
JOCKO RIVER WATERSHED, LAKE COUNTY

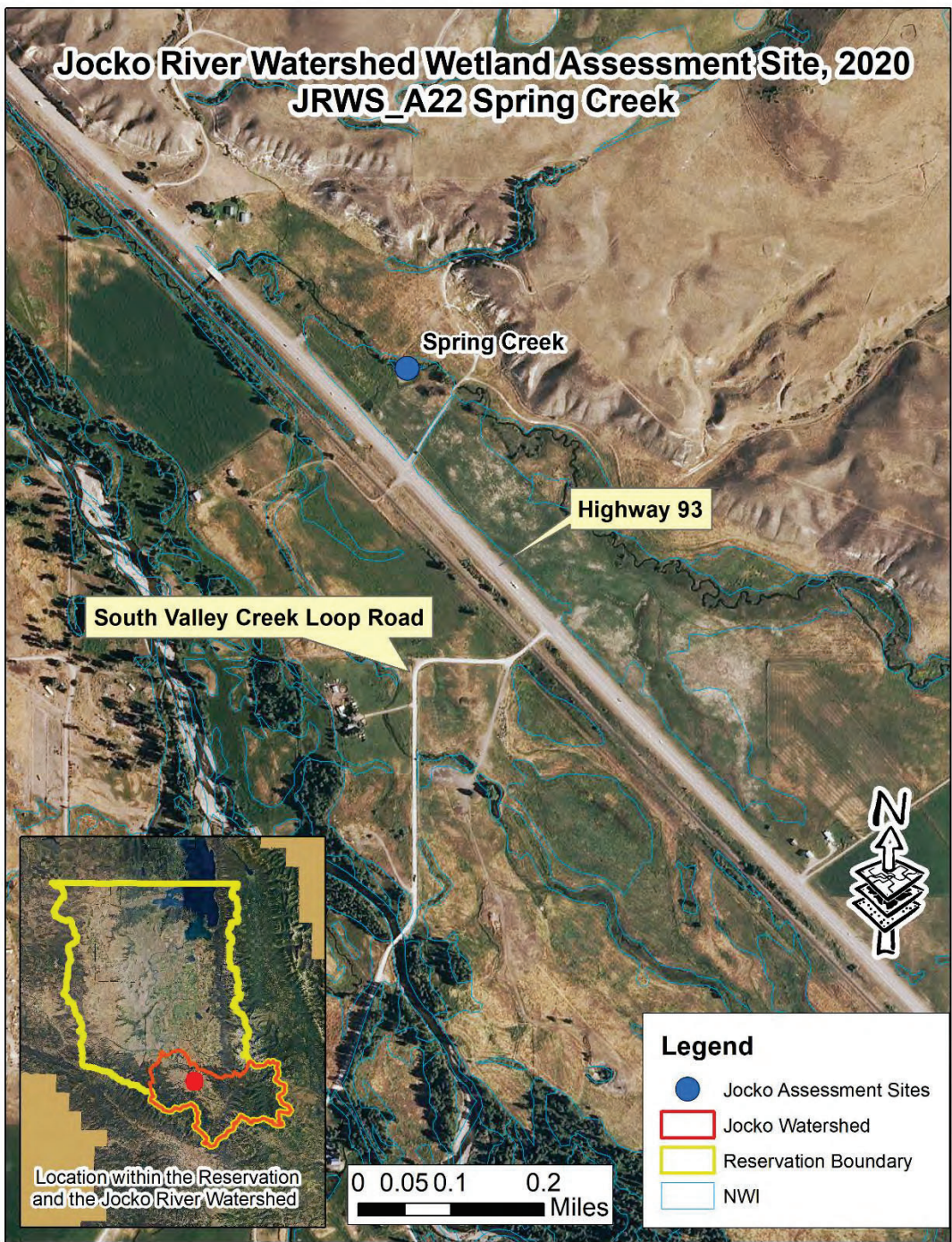


Figure 7. JRWS\_A22 Spring Creek Site Location



Figure 8. JRWS\_A22 Spring Creek Assessment Area

**Site Name:** JRWS\_A22 Spring Creek

**Elevation:** 2,835 feet

**Assessment Date:** 08/19/2020

**Land Status:** CSKT

**Observers:** Tabitha Espinoza, Rusty Sydnor, Dennis Lichtenberg

**Location:** SE ¼ of SE ¼ of Sec 16 T17N R20W

**Lat:** 47.2262      **Long:** -114.1422

**Wetland Area:** 3.6 acres      **Assessment Area:** 1 acre

**Description:** The Spring Creek assessment site is located 5.25 miles north of Arlee, east of Highway 93 and 160 yards north of the property's access and parking area. The AA is a small portion of a large wetland complex that is charged by ground water and is source of the creek. Past efforts had been made to straighten the creek and drain the surrounding emergent wetlands to create hay and grazing lands. Much of the land within the complex has since been purchased with mitigation funds and several restoration projects have taken place within the complex. Few hydrologic alterations have impacted the AA thus the one-acre area has only seen passive restoration efforts. The AA contains the clear and fast-moving stream along with adjacent emergent vegetation and an old oxbow channel. The uplands surrounding the assessment area have been treated for noxious weeds.

## Site Photos



Facing north from the center of the AA. Reed Canarygrass in the foreground and the property line with fence in the background.



Looking east from the center of the assessment area. Spring Creek in the center, mixed emergent vegetation on the left and right edge, and golden willows in the background.



From the middle portion of the AA looking to the southeast. Mixed emergent vegetation in the foreground, an old oxbow in the mid ground and golden willows in the background.



Looking west from the stream's edge. Mixed emergent vegetation in the foreground right, teasel in the center and mixed emergent in the middle. Highway 93 and power lines make up the background.

## Wetland Classification

### HGM Classification:

- Riverine Class

### Cowardin Classification:

- Palustrine System:
  - 60% Emergent Class, Persistent Subclass, Seasonally Flooded Water Regime (PEM1C)
  - 10% Emergent Class, Persistent Subclass, Temporarily Flooded Water Regime (PEM1A)
- Riverine System:
  - 30% Upper Perennial Subsystem, Unconsolidated Bottom Class, Permanently Flooded Water Regime (R3UBH)

## Plant Communities:

Dominant species at the site include *Phalaris arundinacea* (Reed Canarygrass, 20% canopy cover), *Carex utriculata* (Common Beaked Sedge, 15%), and *Epilobium ciliatum* (Hairy Willowherb, 10%). 38 plant species are present. 24 of those are native, 12 are exotic and 2 are undetermined. Native species account for 79% of the 122% total canopy cover; 41% canopy cover is contributed by exotic species and 2% from undetermined. Notable exotic species present are *Phalaris arundinacea* (Reed Canarygrass, 20% canopy cover) and *Dipsacus fullonum* (Common Teasel, 5% canopy cover).

When analyzed by C-value, we notice a large grouping of plants with a C-value of zero. Ten species rank zero and they cover 39% canopy. These plants have a wide range of ecological tolerances and are often opportunistic invaders of natural areas or native taxa that are typically part of a disturbed community. This is reflective of the disturbed nature of the site and indicated a need for continued weed management at the site. The majority of the species and the cover is contributed by plants in the 3-5 range, which are stable and have persisted under the disturbance. But there are also 7 species in the 6-8 range which cover 29% canopy cover combined. These can be indicative of relatively undisturbed communities.

### Changes in Plant Community Composition and Structure

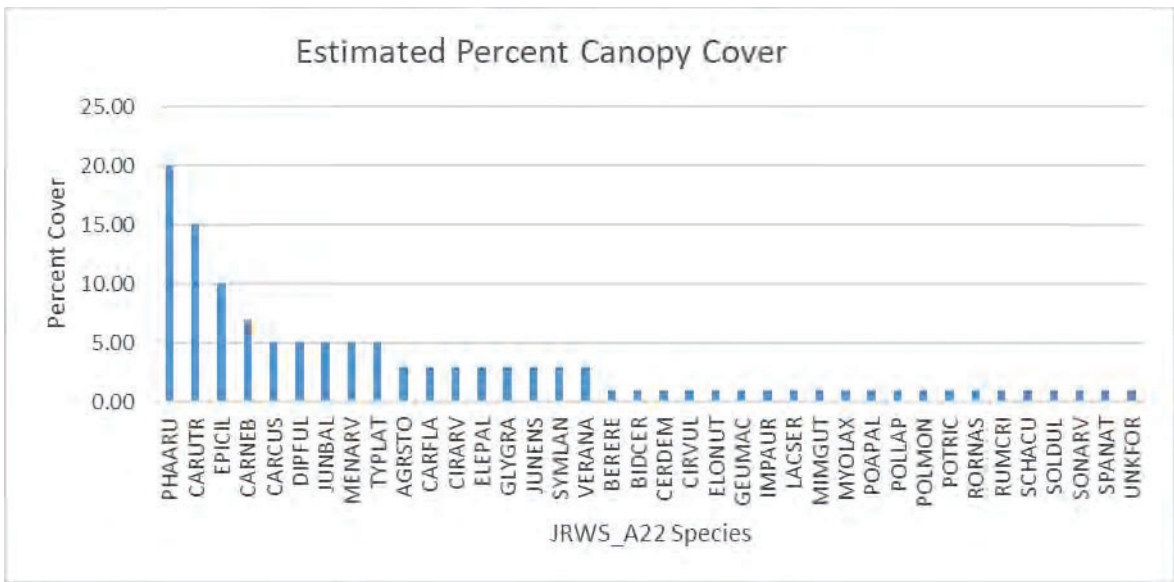
This is the first assessment of the plant community in the wetland; therefore, trends are not available.

**Species list showing percent cover, native status, and coefficient of conservatism**

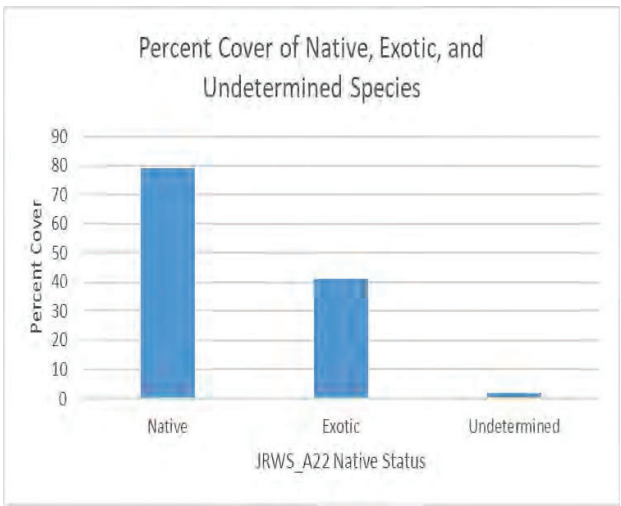
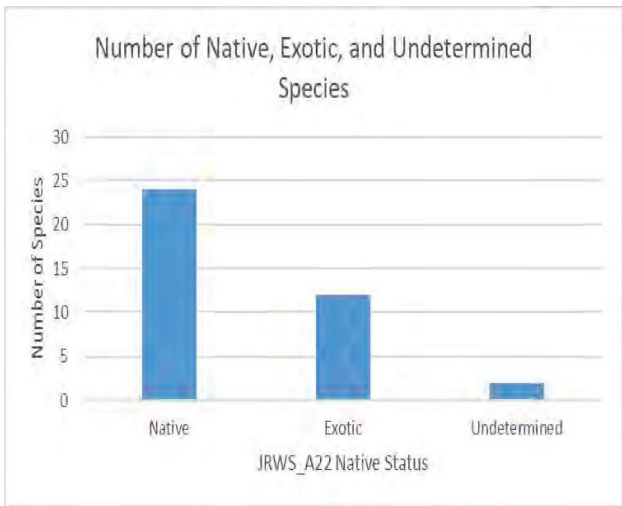
Scientific Name	Common Name	Estimated Percent of Canopy Cover	Native Status	Coefficient of Conservatism	SOC<4
<i>Phalaris arundinacea</i>	Reed Canarygrass	20.00	E	0	
<i>Carex utriculata</i>	Common Beaked Sedge	15.00	N	6	
<i>Epilobium ciliatum</i>	Hairy Willowherb	10.00	N	4	
<i>Carex nebrascensis</i>	Nebraska Sedge	7.00	N	4	

<i>Carex cusickii</i>	Cusick's Sedge	5.00	N	7	
<i>Dipsacus fullonum</i>	Common Teasel	5.00	E	0	
<i>Juncus balticus</i>	Baltic Rush	5.00	N	4	
<i>Mentha arvensis</i>	Wild Mint	5.00	N	4	
<i>Typha latifolia</i>	Broadleaf Cattail	5.00	N	3	
<i>Agrostis stolonifera</i>	Creeping Bentgrass	3.00	E	0	
<i>Carex flava</i>	Yellow Sedge	3.00	N	7	
<i>Cirsium arvense</i>	Canada Thistle	3.00	E	0	
<i>Eleocharis palustris</i>	Creeping Spikerush	3.00	N	4	
<i>Glyceria grandis</i>	American Mannagrass	3.00	N	7	
<i>Juncus ensifolius</i>	Three-stamened Rush	3.00	N	4	
<i>Symphotrichum lanceolatum</i>	White Panicle Aster	3.00	N	4	
<i>Veronica anagallis-aquatica</i>	Brook-pimpernell	3.00	E	0	
<i>Berula erecta</i>	Wild Parsnip	1.00	N	7	
<i>Bidens cernua</i>	Nodding Beggarticks	1.00	N	4	
<i>Ceratophyllum demersum</i>	Hornwort	1.00	N	4	
<i>Cirsium vulgare</i>	Bull Thistle	1.00	E	0	
<i>Elodea nuttallii</i>	Nuttall Waterweed	1.00	N	4	
<i>Geum macrophyllum</i>	Largeleaf Avens	1.00	N	5	
<i>Impatiens aurella</i>	Pale-yellow Jewel-weed	1.00	N	3	S3
<i>Lactuca serriola</i>	Prickly Lettuce	1.00	E	0	
<i>Mimulus guttatus</i>	Common Large Monkeyflower	1.00	N	5	
<i>Myosotis laxa</i>	Small Forget-me-not	1.00	N	4	
<i>Poa palustris</i>	Fowl Bluegrass	1.00	U	3	
<i>Polygonum lapathifolium</i>	Dock-leaf Smartweed	1.00	N	2	
<i>Polypogon monspeliensis</i>	Rabbit's-foot Grass	1.00	E	1	
<i>Potamogeton richardsonii</i>	Richardson's Pondweed	1.00	N	6	
<i>Rorippa nasturtium-aquaticum</i>	Watercress	1.00	E	0	
<i>Rumex crispus</i>	Curly Dock	1.00	E	1	
<i>Schoenoplectus acutus</i>	Hardstem Bulrush	1.00	N	5	
<i>Solanum dulcamara</i>	Climbing Nightshade	1.00	E	0	
<i>Sonchus arvensis</i>	Field Sowthistle	1.00	E	0	
<i>Sparganium natans</i>	Small Bur-reed	1.00	N	6	
<i>Unknown forb</i>	Unknown forb	1.00	U	N/A	
	<b>Total Cover</b>	<b>122.00</b>			
	<b>Total Number of species</b>	<b>38</b>			

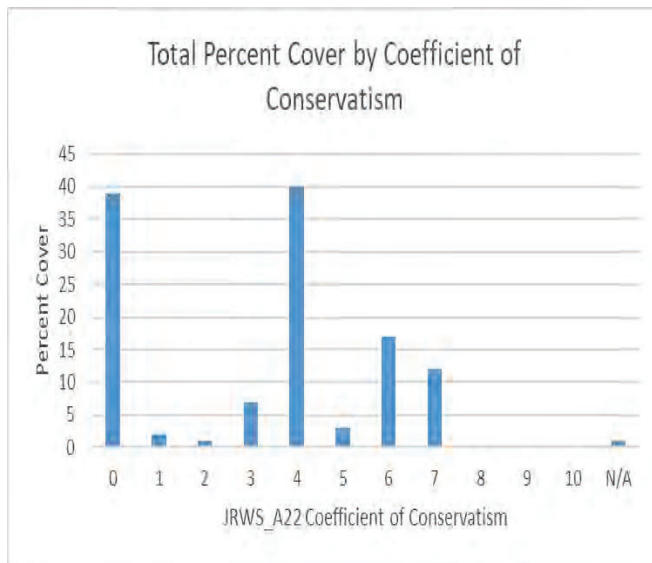
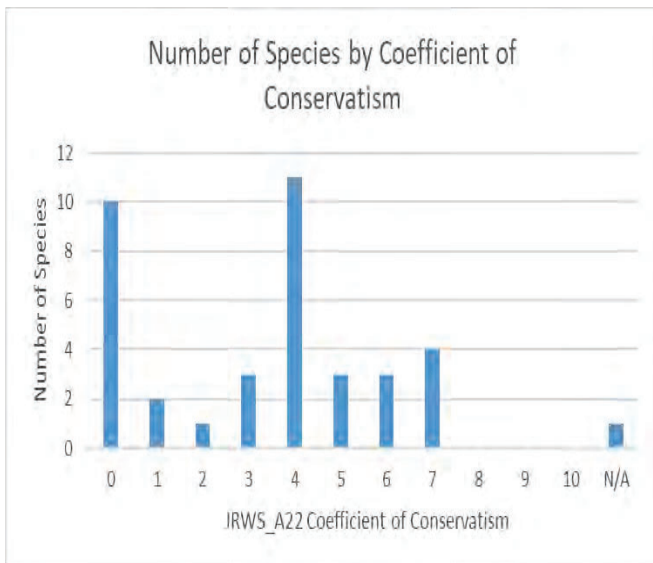
**Relative Abundance Graph of Plant Species**



**Native Species Status**



**Coefficient of Conservatism**



**Wetland Functions:**

Receiving only 55.4%, this is a category III wetland. The only functions it serves exceptionally well are groundwater discharge/recharge (since it is springfed) and sediment/shoreline stabilization, since it has > 65% cover by plant species with stability ratings greater than 6, such as Reed Canarygrass. It also functions well (.7) for Sediment/Nutrient/Toxicant Retention and Removal, and Production Export/ Food Chain Support. This site is documented habitat for an S3 species, Pale Yellow Jewel-Weed.

**Summary Table of Wetland Functions and Total Score**

Function and Value Variables	Actual Functional Points	Comments
A. Habitat for Federally Listed or Proposed Threatened or Endangered Plants or Animals	0.1	Suspected incidental for Grizzly Bear.
B. Habitat for plants or animals rated S1, S2, or S3 by the Montana Natural Heritage Program	0.6	Documented: Pale-yellow Jewel-weed (S3). Suspected secondary use: Western Toad (S2), Great Blue Heron, Townsend’s Big-eared Bat, Hoary Bat, Little Brown Myotis, Fringed Myotis (S3)
C. General Wildlife Habitat Rating	0.3	Wildlife use is moderate, Highway 93 is west of the AA and acts as a barrier to the Jocko River. Structural diversity is low with permanent/perennial water, and disturbance is high.
D. General Fish/Aquatic Habitat Rating	0.5	Cold water fishery due to ground water. Adequate hiding cover, suboptimal thermal cover, introduced game fish, whirling disease has been documented in the area.



E. Flood Attenuation	0.5	Stream is slightly entrenched with less than 25% shrub cover and an unrestricted outlet.
F. Short and Long Term Surface Water Storage	0.4	Emergent wetland is subject to flooding and ponding of less than 1 acre foot of season/intermittent water more than 5 out of 10 years
G. Sediment/Nutrient/Toxicant Retention and Removal	0.7	70% of the wetland is vegetated, no evidence of flooding or ponding at the site, the AA has an unrestricted outlet.
H. Sediment/Shoreline Stabilization	1	Permanent water, > 65% cover by plant species that has >6 stability rating such as Reed Canarygrass
I. Production Export/ Food Chain Support	0.7	Vegetated component of 1-5 acres moderate fish and wildlife rating, the AA has an unrestricted outlet and permanent water. No buffer modification due to noxious weed species in the surrounding upland.
J. Groundwater Discharge/Recharge	1	Discharge indicators include: springs, vegetation growing during the dormant season, seep, permanently flooded, outlet and no inlet, shallow water table.
K. Uniqueness	0.1	No rare types or associations and low structural diversity with high disturbance.
L. Recreation/Education Potential	0.2	This area is easily accessible, in CSKT ownership and available for nonmember recreation with a conservation permit.
<b>Total Score (percent)</b>	<b>55.4%</b>	<b>Total actual functional points:</b>
<b>Overall Analysis Area (AA) Rating</b>	<b>Category III</b>	6.1 points out of 11 possible points