

Level 4 Potential Conservation Area (PCA) Report

Name South Fork Michigan River

Site Code S.USCOHP*26534

IDENTIFIERS

Site ID 2372 Site Class PCA
Site Alias South Fork Michigan River at Silver Creek

Network of Conservation Areas (NCA)

<u>NCA Site ID</u>	<u>NCA Site Code</u>	<u>NCA Site Name</u>
-		No Data

LOCATORS

Nation United States Latitude 402952N
State Colorado Longitude 1060112W

<u>Quad Code</u>	<u>Quad Name</u>
40106-D1	Jack Creek Ranch
40106-E1	Gould
40105-D8	Mount Richthofen

County

Jackson (CO)

<u>Watershed Code</u>	<u>Watershed Name</u>
10180001	North Platte Headwaters

SITE DESCRIPTION

Minimum Elevation	8,870.00 Feet	2,703.58 Meters
Maximum Elevation	9,550.00 Feet	2,910.84 Meters

Site Description

The South Fork Michigan River at Silver Creek site is located at the northeastern slope of Owl Mountain. The South Fork and its major tributaries, Mill, No Name, and LaFevre creeks drain the east flank of Owl Mountain while Silver and Porcupine creeks flow west from Seven Utes Mountain to the confluence with the South Fork. The site is typical of a montane, glacially carved riparian shrubland in this portion of Northern Colorado. The upper portion of the riparian shrubland is dominated by a short-stature willow (*Salix wolfii*) carr that is supported by the meandering, low gradient South Fork. The understory vegetation varies with soil saturation; sedges (*Carex utriculata* and *C. aquatilis*) are found in the wettest areas, where grasses such as tufted hairgrass (*Deschampsia cespitosa*), bluejoint reedgrass (*Calamagrostis canadensis*), and several forbs are found in areas that are drier. The lower portions of the site consist of Drummond's willow (*Salix drummondiana*), Rocky Mountain willow (*S. monticola*), and planeleaf willow (*S. planifolia*). The understory supports several native graminoids such as bluejoint reedgrass, water sedge (*Carex aquatilis*), and beaked sedge (*C. utriculata*). Beaver (*Castor canadensis*) activity is evident throughout the site, creating ponds and channels. The upland vegetation consists of lodgepole pine (*Pinus contorta*) forests that have been severely impacted by the mountain pine beetle (*Dendroctonus* spp.).

Key Environmental Factors

Beaver (*Castor canadensis*) are primary users as well and maintain the riparian shrublands. Beaver activity forms ponds that slow spring runoff and flooding and retain water that will be released slowly during the growing season. The primary abiotic ecological process to maintain viability is hydrology and more specifically surface flow. Annual and episodic flooding is important in maintaining riparian shrublands (Rondeau 2001).

Climate Description

The site is located within the southeastern portion of an intermountain basin that is enclosed on most sides by mountains that create precipitation shadows for air and moisture. Climate records for Walden indicate a mean annual precipitation of 10.53 inches (WRCC 2009). Annual mean for snowfall is 57.1 inches. The lowest average temperature (Jan.) is 3.9 degrees F and the highest average temperature (July) is 78.5 degrees F.

Land Use History

No Data

Cultural Features

No Data

SITE DESIGN

Site Map Y - Yes Mapped Date 11/05/2009
Designer Culver, D.R.

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Boundary Justification

Boundaries are drawn to capture the immediate watershed that starts below Owl and Seven Utes mountains to the confluence with the mainstem of the Michigan River. The boundaries were developed to include immediate ecological processes. Specifically the primary ecological process is hydrology, especially surface flow (Rondeau 2001). Only private lands with written permission were surveyed.

Primary Area 2,901.28 Acres 1,174.11 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B3: High Biodiversity Significance

Biodiversity Significance Comments

This site supports a good (B-ranked) occurrence of a globally vulnerable (G3/S3) *Salix wolfii* / mesic forb riparian shrubland, a good (B-ranked) occurrence of a globally vulnerable (G3/S3) *Salix drummondiana* / *Calamagrostis canadensis* lower montane willow carr, a fair (C-ranked) occurrence of a globally vulnerable (G3/S3) *Picea pungens* / *Alnus incana* montane riparian forest and a fair (C-ranked) occurrence of a globally vulnerable (G3/S3) *Salix monticola* / *Carex aquatilis* montane riparian willow carr. In addition, there is an extant occurrence of the state rare (G5/S3) wood frog (*Rana sylvatica*).

Other Values Rank No Data

Other Values Comments

No Data

LAND MANAGEMENT ISSUES

Land Use Comments

Camping and all terrain vehicle use occur in summer; snowmobiling is popular in winter.

Natural Hazard Comments

No Data

Exotics Comments

Canada thistle is present in drier areas.

Offsite

No Data

Information Needs

Snowmobiling impacts on vegetation are unknown.

ASSOCIATED ELEMENTS OF BIODIVERSITY

<u>Element</u>			<u>Global</u>	<u>State</u>	<u>Driving</u>
<u>State ID</u>	<u>State Scientific Name</u>	<u>State Common Name</u>	<u>Rank</u>	<u>Rank</u>	<u>Site Rank</u>
24572	<i>Salix wolfii</i> / Mesic Forbs Shrubland	Subalpine Riparian Willow Carr	G3	S3	Yes
24473	<i>Salix drummondiana</i> / <i>Calamagrostis canadensis</i> Shrubland	Lower Montane Willow Carrs	G3	S3	Yes
24518	<i>Picea pungens</i> / <i>Alnus incana</i> Woodland	Montane Riparian Forests	G3	S3	No
24965	<i>Salix monticola</i> / <i>Carex aquatilis</i> Shrubland	Montane Riparian Willow Carr	G3	S3	No
17095	<i>Rana sylvatica</i>	Wood Frog	G5	S3	No

REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
194561	Culver, D.R. 2006. Final Report: Rare Plant Survey for Owl Mountain Area and Medicine Bow/Rout National Forest. Colorado Natural Heritage Program, Fort Collins, CO.
198407	Culver, D.R., K. Decker, J. Parker, J. Bell, J. Sovell, and J. Huggins. 2010. CNHP Final Report: Identification and Assessment of Important Wetlands within the North Platte Watershed, CO. Colorado Natural Heritage Program, Fort Collins, CO.
190863	Rondeau, R. 2001. Ecological system viability specifications for Southern Rocky Mountain ecoregion. First Edition. Colorado Natural Heritage Program, Colorado State University, Fort Collins, CO. 181 pp.
198320	Western Regional Climate Center. 2009. Record Climate Summaries. Accessed in 2009. http://www.wrcc.dri.edu/

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ADDITIONAL TOPICS

Additional Topics

Original site design by Culver, D.R. 2006-10-19.

VERSION

Version Date 11/05/2009

Version Author Culver, D.R.

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