

# Level 4 Potential Conservation Area (PCA) Report

Name West Fourmile Creek

Site Code S.USCOHP\*28191

## IDENTIFIERS

Site ID 2723 Site Class PCA  
Site Alias None

### 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 384620N  
State Colorado Longitude 1051955W

Quad Code Quad Name  
38105-G3 Wrights Reservoir

County  
Park (CO)  
Teller (CO)

Watershed Code Watershed Name  
11020002 Upper Arkansas

## SITE DESCRIPTION

Minimum Elevation	8,040.00 Feet	2,450.59 Meters
Maximum Elevation	8,400.00 Feet	2,560.32 Meters

### Site Description

West Fourmile Creek passes through a narrow steep-walled canyon that is less than 0.6 miles long. The creek gradient is not particularly steep because most of the elevation drop is in the form of a waterfall. Swimmers have built a simple rock dam to enlarge the plunge pool below the waterfall. The canyon is quite popular for outdoor recreation because of its easy access from Guffey Road. Above and below the canyon, the creek passes through a very wide, flat, wet meadow. Because the meadow is used for cattle grazing, there are stock ponds at the eastern edge of the site. Within the canyon, there are two groves of Douglas-fir (*Pseudotsuga menziesii*) / blue spruce (*Picea pungens*) forest on non-vertical sections of the north-facing canyon wall. Other non-vertical canyon walls contain ponderosa pine (*Pinus ponderosa*) woodlands. Vertical walls have a sparse cover of shrubs such as waxflower (*Jamesia americana*), Boulder raspberry (*Rubus deliciosus*), and fringed sage (*Artemisia frigida*). The riparian plant communities within the site include beaked sedge (*Carex utriculata*) herbaceous vegetation upstream from the waterfall and a coyote willow (*Salix exigua*) / mesic graminoid shrubland below the waterfall. An American Dipper (*Cinclus mexicanus*) was observed above the waterfall, suggesting high quality riparian habitat. The site's soil is classified as Adderton cumulic cryaquolls, which are deep, very poorly drained soils on stream terraces (USDA NRCS 2008). The canyon walls are Pikes Peak granite outcrops (Tweto 1979).

### Key Environmental Factors

Fendler's cloak-fern (*Argyrochosma fendleri*) is limited to crevices in the dry south-facing granite canyon wall. It depends on crevices where vertical solid rock limits competition from other plants and disturbance.

### Climate Description

Average annual precipitation is 16.2 inches. Snowfall is greatest in April and May. Monsoon rains peak in July and August. Spring and summer therefore have the greatest precipitation, and sunny fall weather dries out the landscape. Average maximum temperature is lowest, 30 °F (-1.1 °C), in January, and highest, 75.4 °F (24.1 °C), in July. Average minimum temperature is lowest, -2.8 °F (-19.4 °C), in January, and highest, 45.9 °F (7.7 °C) in July. (<http://www.worldclimate.com>.)

### Land Use History

No Data

### Cultural Features

No Data

## SITE DESIGN

Site Map Y - Yes Mapped Date 11/30/2010  
Designer Shaw, A.E.

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## Boundary Justification

The boundary is drawn to include the entire length and depth of the canyon because the entire extent of the canyon walls is appropriate habitat for the rare plant. No private property was surveyed at this site because the plant populations of interest are located on Bureau of Land Management (BLM) public land.

Primary Area 75.74 Acres 30.65 Hectares

## SITE SIGNIFICANCE

Biodiversity Significance Rank B3: High Biodiversity Significance

## Biodiversity Significance Comments

This site is drawn for a good (B-ranked) occurrence of the globally vulnerable (G3/S3) plant Fendler's cloak-fern (*Argyrochosma fendleri*), which spans the Southern Rocky Mountains.

Other Values Rank No Data

## Other Values Comments

No Data

## LAND MANAGEMENT ISSUES

## Land Use Comments

No Data

## Natural Hazard Comments

No Data

## Exotics Comments

Exotic plants were not observed on the granite walls hosting the rare plant, but were abundant in the riparian vegetation. Riparian exotics include timothy (*Phleum pratense*), Canada thistle (*Cirsium arvense*), Kentucky bluegrass (*Poa pratensis*), redtop (*Agrostis gigantea*), field pennycress (*Thlaspi arvense*), possible quackgrass (*Elymus repens*), smooth brome (*Bromus inermis*), black medic (*Medicago lupulina*), and red clover (*Trifolium pratense*).

## Offsite

No Data

## Information Needs

No Data

## 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>
24246	<i>Argyrochosma fendleri</i>	Fendler cloak-fern	G3	S3	Yes

## REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
198660	Culver, D.R., D. Malone, and A. Shaw. 2011. CNHP Final Report: Survey of Critical Biological Resources in Teller County, Colorado. Colorado Natural Heritage Program, Fort Collins, CO.
192747	Tweto, O. 1979. Geologic Map of Colorado, 1:500,000. United States Geological Survey, Department of Interior, and Geologic Survey of Colorado, Denver, CO.
198640	USDA Natural Resource Conservation Service. 2008. Soil Survey Geographic (SSURGO) Database for Teller-Park Area, Parts of Teller and Park Counties, Colorado. Fort Worth, TX: United States Department of Agriculture, Natural Resource Conservation Service.

## ADDITIONAL TOPICS

## Additional Topics

No Data

## VERSION

Version Date 11/30/2010

Version Author Shaw, A.E.

## Disclaimer

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