

Level 4 Potential Conservation Area (PCA) Report

Name Fourmile Creek at Sunlight

Site Code S.USCOHP*16353

IDENTIFIERS

Site ID 617 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 392510N
State Colorado Longitude 1071941W

<u>Quad Code</u>	<u>Quad Name</u>
39107-D3	Cattle Creek
39107-D4	Center Mountain

County

Garfield (CO)

<u>Watershed Code</u>	<u>Watershed Name</u>
14010004	Roaring Fork

SITE DESCRIPTION

Minimum Elevation	-	Feet	-	Meters
Maximum Elevation	-	Feet	-	Meters

Site Description

The site ranges in elevation from about 6,800 feet along Fourmile Creek, to 9,400 feet in the adjacent National Forest. The site is significant because of the Gambel's oak (*Quercus gambelii*)- serviceberry (*Amelanchier utahensis*) shrublands. These shrublands are dense and also include low cover of mountain mahogany (*Cercocarpus montanus*), pinyon pine (*Pinus edulis*), Douglas-fir (*Pseudotsuga mensiesii*), and sagebrush (*Artemesia*). A few very large ponderosa pines (*Pinus ponderosa*) are scattered through the site at lower elevations. The soils and rock outcrops in this area are fine textured sandstones or shales, light in color, tan. Several drainages cross the oak (*Quercus gambelii*) shrubland, most of these are dominated by aspen (*Populus tremuloides*). This large area is in good condition overall, however there are a few scattered roads and trails that fragment the site. The activity along these pathways is creating erosion and weed problems. Sunlight Ski area is due south of the site. The riparian vegetation along Fourmile Creek is dominated by narrowleaf cottonwood (*Populus angustifolia*), blue spruce (*Picea pungens*), and alder (*Alnus incana*). Further upstream, more spruce-fir (*Picea engelmannii*-*Abies lasiocarpa*)/alder (*Alnus incana*), willows (*Salix drummondiana*, *Salix monticola*, and *Salix bebbiana*), and alder (*Alnus incana*) shrublands are found in a moderately wide valley bottom. The road follows Fourmile Creek and appears to have less of an impact upstream of the ski area. Downstream of the ski area the riparian vegetation is in poor condition. Adjacent uplands are gradually to steeply sloping valley sides with mixed aspen (*Populus tremuloides*) conifer forests. A good occurrence of subalpine fir/thimbleberry (*Abies lasiocarpa*/*Rubus parviflorus*) community has been documented within this site. There is not enough known about this community type to suggest conservation action, though it is ranked a G5/S2 by CNHP. A total of 6,298 acres are included in the site boundaries. Large mesic meadows occupy most of Fourmile Park, while Booth's willow (*Salix boothii*), wolf willow (*S. wolfii*), beaked sedge (*Carex utriculata*), and water sedge (*C. aquatilis*) are dominant along Fourmile Creek and the numerous drainages within the park. Near the eastern end of Fourmile Park on a north-facing slope is an extremely large willow carr supported by groundwater discharge. This carr is dominated by Booth's willow, wolf willow, strapleaf willow (*Salix eriocephala* var. *ligulifolia*) and a very high diversity of herbaceous species. Soils at this site are not mapped by the county soil survey. The U.S. Forest Service in Glenwood Springs may have soil maps for this area. Soils were highly saturated in the large hillside willow carr (*Salix boothii*/Mesic graminoid) and had peat accumulation in the wettest areas. A brief soil profile, taken from the large hillside willow carr, is given below: O Horizon 2-0 inches 10 YR 2/1 A Horizon 0-12 inches 10 YR 2/1 silty clay The riparian areas had an abundance of gravel and stones, but there was some soil formation along with organic matter accumulation under the willows. A functional assessment was also conducted for this site, please see report (Survey of Critical Wetlands and Riparian Areas of Garfield County, Rocchio, J. 2000).

Key Environmental Factors

No Data

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Climate Description

No Data

Land Use History

No Data

Cultural Features

No Data

SITE DESIGN

Site Map Y - Yes

Mapped Date 01/02/2001

Designer Rocchio, F.J.

Boundary Justification

This site includes the mosaic of community types in which the element occurrences are found. The surrounding high quality habitat is included to act as a buffer to direct disturbances, such as trampling, and indirect disturbances, such as unnatural erosion. The site also provides additional suitable habitat to allow for natural migration of the elements. Fourmile Park and the numerous streams draining into Fourmile Creek were included to ensure natural hydrological process remain intact for the two riparian communities. The large willow carr is supported by groundwater discharge. The site boundaries do not account for the source of this groundwater. Adequate protection for this community should consider those areas that contribute to this groundwater flow.

Primary Area 8,262.20 Acres

3,343.61 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B3: High Biodiversity Significance

Biodiversity Significance Comments

A good example of the globally vulnerable Booth's willow/mesic graminoid willow carr is found at this site. The occurrence at this site has a very high diversity of herbaceous species. This community is found in Colorado, Utah, Idaho, and likely occurs in Wyoming and Montana. The site also harbors a good example of three common plant communities: Booth's willow/beaked sedge willow carr, subalpine fir/thimbleberry forest, and oak-serviceberry shrubland.

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

No Data

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>
24746	<i>Abies lasiocarpa</i> / <i>Rubus parviflorus</i> Forest	Subalpine Forests	G5	S2	No
24702	<i>Quercus gambelii</i> / <i>Amelanchier utahensis</i> Shrubland	Mixed Mountain Shrubland	G3G5	SU	No
24517	<i>Salix boothii</i> / <i>Carex utriculata</i> Shrubland	Booth's Willow/Beaked Sedge	G4	S3	No
24614	<i>Salix boothii</i> / Mesic Graminoids Shrubland	Riparian Willow Carr	G3?	S3	Yes

REFERENCES

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Reference ID

Full Citation

160919

Lyon, P. 2000. Colorado Natural Heritage Program Biological Assessment of Garfield County.

160810

Rocchio, J. 2000. Colorado Natural Heritage Program Wetland Inventory/Assessment of Garfield County.

ADDITIONAL TOPICS

Additional Topics

No Data

VERSION

Version Date 01/02/2001

Version Author Rocchio, F.J.

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