

Level 4 Potential Conservation Area (PCA) Report

Name Cathedral Bluffs

Site Code S.USCOFO*36

IDENTIFIERS

Site ID 1206 Site Class PCA
Site Alias South Cathedral Bluffs

Network of Conservation Areas (NCA)

<u>NCA Site ID</u>	<u>NCA Site Code</u>	<u>NCA Site Name</u>
2469	S.USCOHP*27038	Piceance

LOCATORS

Nation United States Latitude 394807N
State Colorado Longitude 1083358W

Quad Code Quad Name

39108-G5	Black Cabin Gulch
39108-F5	Razorback Ridge
39108-G4	Yankee Gulch
39108-G6	White Coyote Draw
39108-F4	Figure Four Spring

County

Rio Blanco (CO)

Watershed Code Watershed Name

14050006	Piceance-Yellow
14050007	Lower White

SITE DESCRIPTION

Minimum Elevation	8,150.00	Feet	2,484.12	Meters
Maximum Elevation	8,625.00	Feet	2,629.00	Meters

Site Description

This area in Rio Blanco County includes the large northwest to southeast-trending, relatively flat surface above Cathedral Bluffs and the adjoining steep cliff exposures of shale and marlstone of the Parachute Creek Member of the Green River Formation. The cliffs face southwest. The southeastern 3/4 of the site is private, owned by Exxon-Mobile, and was surveyed in 2007 with their written permission. The northwestern 1/4 is BLM, Craig District. The relatively flat, open areas are predominately composed of Indian parsley (*Aletes anisatus*), rock jasmine (*Androsace septentrionalis*), tufted milk-vetch (*Astragalus spatulatus*), rough Indian paintbrush (*Castilleja scabrida*), bastard toadflax (*Comandra umbellatum*), erect cat's-eye (*Cryptantha stricta*), western wallflower (*Erysimum capitatum*), common flax (*Linum lewisii*), rayless tansyaster (*Machaeranthera grindelioides*), Lambert's locoweed (*Oxytropis lambertii*), mat penstemon (*Penstemon caespitosus*), longleaf phlox (*Phlox longifolia*), and thrift mock goldenweed (*Stenotus armerioides*). The steep, white shale slopes above the cliffs support Colorado bedstraw (*Galium coloradoense*), spearleaf wild buckwheat (*Eriogonum loncophyllum*), narrowleaf paintbrush (*Castilleja linariifolia*), an unusual glabrate version of Barneby's thistle (*Cirsium barnebyi*), fineleaf hymenopappus (*Hymenopappus filifolius*), rayless tansyaster, mountain mahogany (*Cercocarpus montanus*), Douglas-fir (*Pseudotsuga menziesii*), and pinon pine (*Pinus edulis*). Piceance bladderpod (*Lesquerella parviflora*) and sun-loving meadowrue (*Thalictrum heliophilum*), both globally imperiled species, were found inhabiting each area surveyed along the bluffs above the cliffs. In those areas, the following plants were also present: Barneby's columbine (*Aquilegia barnebyi*), nettle (*Urtica gracilis*) and oceanspray (*Holodiscus dumosus*). The northern end of the site contains grasslands with bluebunch wheatgrass (*Pseudoroegneria spicata*), needle and thread (*Hesperostipa comata*), sticky-flowered rabbitbrush (*Chrysothamnus viscidiflorus*), snakeweed (*Gutierrezia sarothrae*), prairie junegrass (*Koeleria macrantha*), Sandberg bluegrass (*Poa secunda*) and fringed sagewort (*Artemisia frigida*). Historically, the area was primarily used for cattle grazing. Although almost entirely privately-owned by Exxon-Mobile, there are currently no well sites and no evidence of activity in the area.

Key Environmental Factors

No Data

Climate Description

In the County, summers are warm or hot in most valleys but are much cooler in the mountains. Winters are cold in the mountains. Summer thunderstorms are prevalent; of the total precipitation, 55% usually falls

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between April and September. Average seasonal snowfall is 74.4 inches, average day time temperature is 45 degrees and average precipitation is 16.5 inches for Meeker between 1948 -2007 (Western Regional Climate Center 2008).

Land Use History

No Data

Cultural Features

No Data

SITE DESIGN

Site Map Y - Yes

Mapped Date 12/20/2007

Designer Lyon, M.J. and J. Huggins

Boundary Justification

The boundaries encompass the areas with existing populations of rare plants and a rare plant community. The Cathedral Bluffs access road serves as the northeastern boundary and the base of the Bluffs serves as the southwestern boundary. This is also the most important scenic area of Cathedral Bluffs and it is important to protect the entire vertical exposure of Green River Formation in order to perpetuate the outstanding scenic value of the site as well as the rare plant populations.

Primary Area 14,309.69 Acres 5,790.95 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B2: Very High Biodiversity Significance

Biodiversity Significance Comments

This site includes a large, excellent (A-ranked) occurrence of the globally imperiled (G2/S2) Piceance bladderpod (*Lesquerella parviflora*) and a good (B-ranked) occurrence of the globally imperiled (G2/S2) sun-loving meadowrue (*Thalictrum heliophilum*), both endemic to Colorado and known only from Garfield, Mesa and Rio Blanco counties. The bladderpod is on the BLM Sensitive Species list, and the meadowrue is on the USFS Sensitive Species list. Historical records indicate an excellent occurrence of the state critically imperiled (G3?/S1) Utah gentian (*Gentianella tortuosa*); however, in 2007 we were only able to verify a fair (C-ranked) occurrence. This species is known only from Rio Blanco County in Colorado and is on the BLM Sensitive Species list. In addition, there is a good (B-ranked) occurrence of the globally imperiled (G2/S2?) western slope grassland, *Pseudoroegneria spicata*, and a good (B-ranked) occurrence of the globally vulnerable (G3/S2) montane riparian forest, *Acer negundo* / *Prunus virginiana*. All the plants of special concern are oil shale endemics, restricted to either Piceance Basin or Uinta Basin. Although not drawn for this species, there are documented Greater Sage-grouse (*Centrocercus urophasianus*) nest sites adjacent to this site. This is a globally secure (G4/S4) species with a restricted range and is also a State Special Concern species and BLM/USFS sensitive species. The Greater Sage-grouse and other sagebrush obligates such as Columbian Sharp-tailed Grouse (*Tympanuchus phasianellus columbianus*), Sage Sparrow (*Amphispiza belli*), and the Brewer's Sparrow (*Spizella breweri*) depend on large, continuous blocks of viable sagebrush habitat such as identified within and adjacent to this site.

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

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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>
16970	<i>Gentianella tortuosa</i>	Utah gentian	G3?	S1	No
21414	<i>Thalictrum heliophilum</i>	sun-loving meadowrue	G2	S2	Yes
16970	<i>Gentianella tortuosa</i>	Utah gentian	G3?	S1	No
17683	<i>Lesquerella parviflora</i>	Piceance bladderpod	G2	S2	Yes
21414	<i>Thalictrum heliophilum</i>	sun-loving meadowrue	G2	S2	No
24678	<i>Acer negundo</i> / <i>Prunus virginiana</i> Forest	Montane Riparian Deciduous Forest	G3	S2	No
17683	<i>Lesquerella parviflora</i>	Piceance bladderpod	G2	S2	No
17683	<i>Lesquerella parviflora</i>	Piceance bladderpod	G2	S2	No
17683	<i>Lesquerella parviflora</i>	Piceance bladderpod	G2	S2	No
23569	<i>Nuttallia multicaulis</i>	many-stem stickleaf	G3	S3	No
19115	<i>Pseudoroegneria spicata</i> Herbaceous Vegetation	Western Slope Grasslands	G2	S2?	Yes

REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
195026	Culver, D., J. Huggins and P. Lyon. 2008. Final Report: Significant Biological Resources in Rio Blanco County, CO. Colorado Natural Heritage Program, Fort Collins, CO.
195034	WRCC. 2008. Western Regional Climate Center. Division of Atmospheric Sciences, Desert Research Institute. Reno, Nevada. < http://www.wrcc.dri.edu >.

ADDITIONAL TOPICS

Additional Topics

Original site design by Rondeau, R.J. 1986-12-12.

VERSION

Version Date	12/20/2007
Version Author	Lyon, M.J. and J. Huggins

Disclaimer

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