

Level 4 Potential Conservation Area (PCA) Report

Name Calamity Ridge

Site Code S.USCOHP*26595

IDENTIFIERS

Site ID 2380 Site Class PCA
Site Alias Fletcher Gulch at Cathedral

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

County

Rio Blanco (CO)

SITE DESCRIPTION

Site Description

Calamity Ridge is a north/south trending ridge with drainages to the east and west. Elevations range from a low of 6,600 ft at Indian Springs Draw and Spring Creek, to high of 8,268 ft at Cathedral. Geology is mapped as the Parachute member of the Green River Formation on the ridge top, lower member of the Green River Formation on the west side, and the Uinta Formation, (formerly known as the Evacuation Creek member of the Green River Formation) on the east side. Soils are mainly decomposed shale. Ecological systems include Rocky Mountain Lower Montane Foothill shrubland at the higher elevations, with serviceberry, mountain mahogany and Wyoming sagebrush. Slightly lower elevations have Colorado Plateau Pinon - Juniper Woodland. There are also inclusions of Intermountain Basins Sagebrush Steppe and Big Sagebrush Shrubland, and small pockets of Intermountain Basins shale badland. The wetland community with sagebrush and basin wild rye (*Leymus cinereus*) in Trail Canyon (County Road 122) was described as the best occurrence of this community in the Piceance Basin. It occupies the floodplain of an ephemeral stream. Soils at this location were identified as Glendive fine sandy loam (Torrifluent). Six rare plant species occur within the site. Rare plants along County Road 122 were first described in 1986 when the road was new, and were found to be invading the steep road cut on nearly white, recently exposed shale with very little other vegetation. In 2007, the plants are still present, probably in greater abundance, although exact counts have not been made. There is a high diversity of plant species, in addition to the rare plants. These include the following trees: Utah juniper (*Juniperus osteosperma*), pinon pine (*Pinus edulis*); and shrubs: serviceberry (*Amelanchier utahensis*), white sagebrush (*Artemisia ludoviciana*), green-leaf Manzanita (*Arctostaphylos patula*), shadscale (*Atriplex canescens*), mountain mahogany (*Cercocarpus montanus*), sticky rabbitbrush (*Chrysothamnus viscidiflorus*), green Mormon tea (*Ephedra viridis*), rabbitbrush (*Ericameria nauseosa*), Oregon grape (*Mahonia repens*), mountain lover (*Paxistima myrsinites*), snowberry (*Symphoricarpos oreophilus*), horsebrush (*Tetradymia canescens*); and grasses or grass-like plants: Indian rice grass (*Achnatherum hymenoides*), cheatgrass (*Bromus tectorum*), bottlebush squirreltail (*Elymus elymoides*), Great Basin wild rye (*Leymus cinereus*), white mountain sedge (*Carex geophila*). The following forbs are also present in this area: Barneby's thistle (*Cirsium barnebyi*), linear leaf collomia (*Collomia linearis*), erect Cryptantha (*Cryptantha stricta*), spearleaf wild buckwheat (*Eriogonum lonchophyllum*), wild buckwheat (*Eriogonum umbellatum*), monument plant (*Frasera speciosa*), northern bedstraw (*Galium septentrionale*), snakeweed (*Gutierrezia sarothrae*), granite prickly phlox (*Leptodactylon pungens*), blue flax (*Linum lewisii*), rayless aster (*Machaeranthera grindelioides*), many-stem stickleaf (*Nuttallia multicaulis*), creeping penstemon (*Penstemon caespitosus*), thistle beardtongue (*Penstemon pachyphyllus*), heliotrope phacelia (*Phacelia crenulata*), desert mountain phlox (*Phlox austromontana*), double bladderpod (*Physaria acutifolia*), Piceance twinpod (*Physaria obcordata*), bitterbrush (*Purshia tridentata*), and lobeleaf groundsel (*Senecio multilobatus*).

Key Environmental Factors

Arid, dry climate.

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 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

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Cultural Features

No Data

Minimum Elevation 6,600.00 Feet 2,011.68 Meters
 Maximum Elevation 8,268.00 Feet 2,520.09 Meters

SITE DESIGN

Site Map Y - Yes Mapped Date 12/12/2007
 Designer Lyon, M.J. and J. Huggins

Boundary Justification

Boundary is drawn to capture all element occurrences according to the edaphic requirements.

Primary Area 27,920.72 Acres 11,299.16 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B2: Very High Biodiversity Significance

Biodiversity Significance Comments

The site supports an excellent (A-ranked) and a good (B-ranked) occurrence of the globally critically imperiled (G1G2/S1S2) Piceance twinpod (*Physaria obcordata*). There is also a fair (C-ranked) occurrence of the globally imperiled (G2/S2) Piceance bladderpod (*Lesquerella parviflora*), two good (B-ranked) occurrences of many-stem stickleaf (*Nuttallia multicaulis*), a globally vulnerable (G3/S3) plant, and historic or unranked occurrences of several other plants. In addition, there is an excellent to good (AB-ranked) occurrence of the globally imperiled (G2/S1) basin big sagebrush/ basin rye (*Artemisia tridentata* ssp. *tridentata* / *Leymus cinereus*) sagebrush shrubland.

Other Values Rank No Data

Other Values Comments

The area is very scenic.

ASSOCIATED ELEMENTS OF BIODIVERSITY

Element State ID	State Scientific Name	State Common Name	Global Rank	State Rank	Driving Site Rank
17278	<i>Physaria obcordata</i>	Piceance twinpod	G1G2	S1S2	Y
24677	<i>Artemisia tridentata</i> ssp. <i>tridentata</i> / <i>Leymus cinereus</i> Shrubland	Sagebrush Bottomland Shrublands	G2	S2	Y
24677	<i>Artemisia tridentata</i> ssp. <i>tridentata</i> / <i>Leymus cinereus</i> Shrubland	Sagebrush Bottomland Shrublands	G2	S2	N
19965	<i>Ceanothus martinii</i>	Utah mountain lilac	G4	S1	N
19965	<i>Ceanothus martinii</i>	Utah mountain lilac	G4	S1	N
19965	<i>Ceanothus martinii</i>	Utah mountain lilac	G4	S1	N
17683	<i>Physaria parviflora</i>	Piceance bladderpod	G2	S2	N
24382	<i>Leymus cinereus</i> Alkaline Wet Meadow	Western Slope Grasslands	G2G3Q	S1	N
23569	<i>Nuttallia multicaulis</i>	Many-stem stickleaf	G3	S3	N
23569	<i>Nuttallia multicaulis</i>	Many-stem stickleaf	G3	S3	N
23569	<i>Nuttallia multicaulis</i>	Many-stem stickleaf	G3	S3	N
23569	<i>Nuttallia multicaulis</i>	Many-stem stickleaf	G3	S3	N
24426	<i>Penstemon fremontii</i> var. <i>glabrescens</i>	Fremont's beardtongue	G3G4T2	S2	N
17278	<i>Physaria obcordata</i>	Piceance twinpod	G1G2	S1S2	Y
17683	<i>Physaria parviflora</i>	Piceance bladderpod	G2	S2	N

LAND MANAGEMENT ISSUES

Land Use Comments

No Data

Natural Hazard Comments

No Data

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Exotics Comments

Cheatgrass (*Bromus tectorum*) is present.

Offsite

No Data

Information Needs

No Data

REFERENCES

Reference ID

Full Citation

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.
195042	USFS, White River Field Office. 2007. Personal communication to Peggy Lyon of CNHP.
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 Culver, D.R. 2006-11-01.

LOCATORS

Nation United States

Latitude 400352N

State Colorado

Longitude 1083202W

Quad Code Quad Name

40108-A4	Barcus Creek
40108-A6	Gillam Draw
40108-B5	Divide Creek
39108-H5	Sagebrush Hill
40108-A5	Calamity Ridge

Watershed Code Watershed Name

14050007	Lower White
14050006	Piceance-Yellow

VERSION

Version Date 12/12/2007

Version Author Lyon, M.J. and J. Huggins

DISCLAIMER

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