# Level 4 Potential Conservation Area (PCA) Report

**Name** Soldier Creek **Site Code** S.USCOHP*26898

## IDENTIFIERS

**Site ID** 2439 **Site Class** PCA

**Site Alias** None

**Network of Conservation Areas (NCA)**

| NCA Site ID | NCA Site Code | NCA Site Name |
|---|---|---|
| - | | No Data |

## LOCATORS

**Nation** United States **Latitude** 394345N

**State** Colorado **Longitude** 1083412W

| Quad Code | Quad Name |
|---|---|
| 39108-G5 | Black Cabin Gulch |
| 39108-F5 | Razorback Ridge |

**County**

Rio Blanco (CO)

| Watershed Code | Watershed Name |
|---|---|
| 14050007 | Lower White |

## SITE DESCRIPTION

| | | | | |
|---|---|---|---|---|
| **Minimum Elevation** | 6,567.00 | **Feet** | 2,001.62 | **Meters** |
| **Maximum Elevation** | 8,400.00 | **Feet** | 2,560.32 | **Meters** |

**Site Description**

Soldier Creek and its tributaries, Right, Middle, and Left Forks, are perennial streams located in the western portion of the Piceance Creek Basin (Basin). Soldier Creek drains the second basin to the east of the prominent physiographic feature, Razorback Ridge. This portion typifies the Basin features with depositional valleys at the base of uplifted hills that dip towards the creeks. Soldier Creek is fed by numerous springs and alluvial fan and gulches throughout its length within the site. Soldier Creek cuts down through the sedimentary rocks of the Parachute Creek Member forming a steep, entrenched stream with deep pools. The floodplain is formed by both alluvial and colluvial processes. The overstory layer is dominated by Douglas-fir ( *Pseudotsuga menziesii*) and boxelder (*Acer negundo*) with an occasional narrowleaf cottonwood (*Populus angustifolia*). The shrub layer is diverse with chokecherry (*Prunus virginiana*), Rocky Mountain willow (*Salix monticola*), dogwood (*Cornus sericea*), Rocky Mountain maple (*Acer glabrum*), elderberry (*Sambucus microbotrys*), snowberry (*Symphoricarpos rotundifolia*) and golden currant (*Ribes aureum*). The forb and graminoid layers consist mainly of native plants, except for hay grasses.

**Key Environmental Factors**

The Parachute Creek Member (Green River Formation) dominates this portion of the County. It is comprised of marlstone, standstone, and oil shale. Lake Creek is located is modern alluvium from the Quaternary Age. Soils are shallow and well drained derived from sandstone and shale residues. Soils are classified as Kobar silty loam, Razorba channery sandy loam, and Patent loam.

**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

**Cultural Features**

No Data

## SITE DESIGN

**Site Map** Y - Yes **Mapped Date** 01/22/2008

**Designer** Culver, D.R.

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**Boundary Justification**

Boundary was delineated to encompass the known occurrence of the riparian forest plant communities and potential habitat along the floodplain. This boundary only includes the immediate ecological processes. Both public and private property are included, however, only public lands were surveyed.

**Primary Area** 641.75 **Acres** 259.71 **Hectares**

## SITE SIGNIFICANCE

**Biodiversity Significance Rank** B3: High Biodiversity Significance

**Biodiversity Significance Comments**

This site encompasses an excellent (A-ranked) occurrence of a globally vulnerable (G3/S2) boxelder / chokecherry (*Acer negundo* / *Prunus virginiana*) riparian forest and an excellent (A-ranked) occurrence of a state rare (G4?/S1) Doulas-fir / Rocky Mountain maple (*Pseudotsuga menziesii* / *Acer glabrum*) riparian forest. The box elder / chokecherry plant community is found on the wider portions of the floodplain. The shrub canopy is very thick indicating that it has not been disturbed (Carsey et al. 2003). The Douglas-fir / Rocky Mountain maple plant community is found throughout the intermountain west and Canada, but is uncommon in Colorado (Carsey et al. 2003). There is an historical occurrence of the globally vulnerable (G3T3/S3) Purpus' sullivantia (*Sullivantia hapemanii* var. *purpusii*), last seen in 1982. This species was not found in 2007; however, appropriate habitat still exists and further surveys could locate the occurrence. There are documented nest sites above the site for Greater Sage-grouse (*Centrocercus urophasianus*), a globally apparently secure (G4/S4) species with a restricted range. This is also a State Special Concern species and a BLM/FS 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 habitat such as identified within and adjacent to the site.

**Other Values Rank** No Data

**Other Values Comments**

No Data

## LAND MANAGMENT ISSUES

**Land Use Comments**

No Data

**Natural Hazard Comments**

No Data

**Exotics Comments**

There were several non-native plants present: Canada thistle (*Breea arvensis*), houndstongue (*Cynoglossum officinale*), and mullein (*Verbascum thapsus*) especially at the northern section adjacent to the two track.

**Offsite**

No Data

**Information Needs**

No Data

## ASSOCIATED ELEMENTS OF BIODIVERSITY

| Element State ID | State Scientific Name | State Common Name | Global Rank | State Rank | Driving Site Rank |
|---|---|---|---|---|---|
| 21796 | *Oncorhynchus clarkii pleuriticus* | Colorado River Cutthroat Trout | G4T3 | S3 | No |
| 24678 | *Acer negundo / Prunus virginiana* Forest | Montane Riparian Deciduous Forest | G3 | S2 | Yes |
| 24528 | *Pseudotsuga menziesii / Acer glabrum* Forest | Lower Montane Forests | G4? | S1 | No |

## REFERENCES

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| Reference ID | Full Citation |
|---|---|
| 160903 | Carsey, K., D. Cooper, K. Decker, D. Culver, and G. Kittel. 2003. Statewide wetlands classification and characterization: Wetland plant associations of Colorado. Prepared for Colorado Department of Natural Resources, Denver, CO by Colorado Natural Heritage Program, Fort Collins, CO. |
| 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**

No Data

## VERSION

**Version Date** 01/22/2008

**Version Author** Culver, D.R.

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