

# Level 4 Potential Conservation Area (PCA) Report

Name Missouri Creek

Site Code S.USCOHP\*27017

## IDENTIFIERS

Site ID 2461 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 394748N  
State Colorado Longitude 1090054W

### Quad Code Quad Name

39109-G1 Dragon  
39108-G8 Texas Creek

### County

Rio Blanco (CO)  
Uintah (UT)

### Watershed Code Watershed Name

14050007 Lower White

## SITE DESCRIPTION

Minimum Elevation	5,756.00 Feet	1,754.43 Meters
Maximum Elevation	6,900.00 Feet	2,103.12 Meters

### Site Description

The site is located in western Rio Blanco County between Highway 139 and the Colorado/Utah border. It encompasses the westernmost part of the drainages of Missouri Creek and Texas Creek in Colorado. From an elevation of 5,756 feet at the Utah border, the land slopes upward to the north to Park Mountain at 6,900 ft. Three geological formations are present, from west to east: Lower Green River formation, Wasatch, and Upper Mesa Verde, consisting primarily of sandstones and shales. The site includes both private and BLM lands. The lower elevations are composed of sagebrush shrublands, with Wyoming big sagebrush (*Artemisia tridentata* ssp. *wyomingensis*), black sagebrush (*A. nova*) and pygmy sagebrush (*Seriphidium pygmaeum*). Upper slopes are covered with pinon - juniper woodlands. Rare plants of four species were found in thirty different locations. Common species include snakeweed (*Gutierrezia sarothrae*), rock goldenrod (*Petradoria pumila*), tufted milkvetch (*Astragalus spatulatus*), fineleaf Hymenopappus (*Hymenopappus filifolius*), shadscale (*Atriplex confertifolia*) and Mormon tea (*Ephedra viridis*). Historically, the area was primarily used for cattle grazing. There is currently major oil and gas development in the area, with associated access roads, well pads and pipelines.

### Key Environmental Factors

Drought

### 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 12/11/2007  
Designer Lyon, M.J. and J. Huggins

### Boundary Justification

The site encompasses multiple occurrences of four rare plant species in the western part of the drainages of

# Level 4 Potential Conservation Area (PCA) Report

Name Missouri Creek

Site Code S.USCOHP\*27017

Texas Creek and Missouri Creek within Colorado. There is abundant habitat within the site that is expected to support additional populations of these species.

Primary Area 8,416.19 Acres 3,405.93 Hectares

## SITE SIGNIFICANCE

Biodiversity Significance Rank B3: High Biodiversity Significance

### Biodiversity Significance Comments

The site supports a good (B-ranked) occurrence of the globally vulnerable (G3/S1) narrow-stem gilia (*Gilia stenothyrsa*) and the globally vulnerable (G3/S2) Rollins' cat's-eye (*Oreocarya rollinsii*). In addition, there is a good (B-ranked) occurrence of pygmy sagebrush (*Seriphidium pygmaeum*), a globally apparently secure plant that is rare in Colorado (G4/S1). There are also unranked occurrences of narrow-stem gilia, Rollins' cat's-eye and the globally vulnerable (G3/S2) debris milkvetch (*Astragalus detritalis*). All of the above occurrences were documented in 2006 and 2007.

Other Values Rank No Data

### Other Values Comments

No Data

## LAND MANAGEMENT ISSUES

### Land Use Comments

Grazing and oil and gas activities are present.

### Natural Hazard Comments

No Data

### Exotics Comments

Cheat grass (*Bromus tectorum*), wienerleaf (*Halogeton glomeratus*), and many other exotics are present in lower disturbed areas. Russian wild rye (*Psathrostachys juncea*) has been extensively planted in the area. Other non-native species observed include Russian thistle (*Salsola australis*), desert alyssum (*Alyssum desertorum*), hornhead (*Ranunculus testiculatus*), spreading wallflower (*Erysimum repandum*), yellow sweetclover (*Melilotus officinalis*), smooth brome (*Bromus inermis*), Kentucky bluegrass (*Poa pratensis*), dandelion (*Taraxacum officinale*), and salsify (*Tragopogon dubius*).

### Offsite

No Data

### Information Needs

More information on the response of the rare plants to disturbance would be useful for management.

## ASSOCIATED ELEMENTS OF BIODIVERSITY

<u>Element State ID</u>	<u>State Scientific Name</u>	<u>State Common Name</u>	<u>Global Rank</u>	<u>State Rank</u>	<u>Driving Site Rank</u>
21203	<i>Astragalus detritalis</i>	debris milkvetch	G3	S2	No
18885	<i>Gilia stenothyrsa</i>	narrow-stem gilia	G3	S1	Yes
18627	<i>Oreocarya rollinsii</i>	Rollins' cat's-eye	G3	S2	Yes
18627	<i>Oreocarya rollinsii</i>	Rollins' cat's-eye	G3	S2	No
18627	<i>Oreocarya rollinsii</i>	Rollins' cat's-eye	G3	S2	No
20827	<i>Seriphidium pygmaeum</i>	pygmy sagebrush	G4	S1	No

## 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. < <a href="http://www.wrcc.dri.edu">http://www.wrcc.dri.edu</a> >.

## ADDITIONAL TOPICS

### Additional Topics

No Data

## VERSION

Version Date 12/11/2007

Copyright © 2011. Colorado State University. Colorado Natural Heritage Program. All Rights Reserved.

# Level 4 Potential Conservation Area (PCA) Report

Name Missouri Creek

Site Code S.USCOHP\*27017

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

## Disclaimer

These data are a product and property of Colorado State University, Colorado Natural Heritage Program (CNHP). These data are strictly "on loan" and should be considered "works in progress". Data maintained in the Colorado Natural Heritage Program database are an integral part of ongoing research at CSU and reflect the observations of many scientists, institutions and our current state of knowledge. These data are acquired from various sources, with varying levels of accuracy, and are continually being updated and revised. Many areas have never been surveyed and the absence of data in any particular geographic area does not necessarily mean that species or ecological communities of concern are not present. These data should not be regarded as a substitute for on-site surveys required for environmental assessments. Absence of evidence is NOT evidence of absence. Absence of any data does not mean that other resources of special concern do not occur, but rather CNHP files do not currently contain information to document this presence. CNHP is not responsible for whether other, non-CNHP data providers have secured landowner permission for data collected.

**These data are provided for non-commercial purposes only.** Under no circumstances are data to be distributed in any fashion to outside parties. To ensure accurate application of data, tabular and narrative components must be evaluated in conjunction with spatial components. Failure to do so constitutes a misuse of the data. The Colorado Natural Heritage Program shall have no liability or responsibility to the data users, or any other person or entity with respect to liability, loss, or damage caused or alleged to be caused directly or indirectly by the data, including but not limited to any interruption of service, loss of business, anticipatory profits or indirect, special, or consequential damages resulting from the use of operation of the data. Data users hereby agree to hold CNHP, Colorado State University, and the State of Colorado harmless from any claim, demand, cause of action, loss, damage or expense from or related to data users use of or reliance on the data, regardless of the cause or nature thereof, and even in the event that such cause is attributable to the negligence or misconduct of CNHP.

These data are provided on an as-is basis, as-available basis without warranties of any kind, expressed or implied, INCLUDING (BUT NOT LIMITED TO) WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT. Although CNHP maintains high standards of data quality control, CNHP, Colorado State University, and the State of Colorado further expressly disclaim any warranty that the data are error-free or current as of the date supplied