

# Level 4 Potential Conservation Area (PCA) Report

Name Browns Canyon on Arkansas River

Site Code S.USCOHP\*8997

## IDENTIFIERS

Site ID 1786 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 384120N  
State Colorado Longitude 1060231W

## Quad Code Quad Name

38106-F1	Nathrop
38106-G1	Buena Vista East
38105-F8	Cameron Mountain
38106-E1	Salida West

## County

Chaffee (CO)

<u>Watershed Code</u>	<u>Watershed Name</u>
11020001	Arkansas Headwaters

## SITE DESCRIPTION

Minimum Elevation	7,320.00	Feet	2,231.14	Meters
Maximum Elevation	8,200.00	Feet	2,499.36	Meters

## Site Description

The site is located between Nathrop and Hecla Junction along the Arkansas River. Browns Canyon is the most heavily used section of the upper Arkansas River. Browns Canyon is a northwest extension of the Arkansas Valley, which lies on the western flank of the Mosquito Range. Rocks that comprise Browns Canyon make up a batholith of Precambrian granodiorite that is 1.6 billion years old (Karnuta 1995). Side streams have cut steep gulches through the pinkish granite and metamorphic rock of the area. Pinon - juniper forest dominates the arid lands in Browns Canyon along the Arkansas River. The vegetation changes dramatically as elevation increases, giving way to Douglas-fir (*Pseudotsuga menziesii*), ponderosa pine (*Pinus ponderosa*), and stands of aspen (*Populus tremuloides*) for which Aspen Ridge is named. The area is an important wintering ground for deer and elk. Twenty bighorn sheep were reintroduced into Browns Canyon in 1980, with an additional 20 in both 1982 and 1985. It is estimated that there is currently a herd of 135 bighorns whose range includes Browns Canyon and portions of Aspen Ridge. Other mammals found within the area include mountain lions, black bears, bobcats, foxes, coyotes, pine martens and many smaller animals. Eight species of raptors have been sighted in the area, including Golden Eagle, Prairie Falcons, and Great-horned Owl (CDO 2009). The riparian area is dominated by narrowleaf cottonwood (*Populus angustifolia*), river birch (*Betula occidentalis*) and scattered Rocky Mountain juniper (*Juniperus scopulorum*).

## Key Environmental Factors

No Data

## Climate Description

The area averages 300 days of sunshine each year. A typical summer day is sunny, in the high 70's to low 80's and evening temperatures in the high 40's and low 50's. Annual rainfall is 10.15" and annual snowfall is 30.4" with most snow occurring from the end of October through April.

## Land Use History

Hecla Junction in the southern portion of the site was once one of the major fluorspar mining districts in the United States (Karnuta 1995).

## Cultural Features

No Data

## SITE DESIGN

Site Map Y - Yes Mapped Date 05/02/1997  
Designer Kittel, G.M.

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## Boundary Justification

The boundary is drawn to encompass the local watershed and adjacent side canyons, allowing for the operation of normal hydrological and ecological processes. The boundary includes high quality riparian areas on narrow tributary to Brown's Canyon, as well as the canyon itself. Topographic ridgelines were used as immediate watershed protection.

Primary Area 11,581.01 Acres 4,686.69 Hectares

## SITE SIGNIFICANCE

Biodiversity Significance Rank B2: Very High Biodiversity Significance

## Biodiversity Significance Comments

This site supports two excellent (A-ranked) occurrences of a globally imperiled (G2G3/S2S3) montane riparian forest (*Populus angustifolia* - *Juniperus scopulorum*) as well as good (B-ranked) and fair (C-ranked) occurrences of a state rare (G4/S2) foothills riparian shrubland (*Betula occidentalis* / *Maianthemum stellatum*).

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

Site needs visit to confirm boundaries.

## ASSOCIATED ELEMENTS OF BIODIVERSITY

<u>Element</u>			<u>Global Rank</u>	<u>State Rank</u>	<u>Driving Site Rank</u>
<u>State ID</u>	<u>State Scientific Name</u>	<u>State Common Name</u>			
24686	<i>Betula occidentalis</i> / <i>Maianthemum stellatum</i> Shrubland	Foothills Riparian Shrubland	G4?	S2	No
24686	<i>Betula occidentalis</i> / <i>Maianthemum stellatum</i> Shrubland	Foothills Riparian Shrubland	G4?	S2	No
24686	<i>Betula occidentalis</i> / <i>Maianthemum stellatum</i> Shrubland	Foothills Riparian Shrubland	G4?	S2	No
24963	<i>Populus angustifolia</i> - <i>Juniperus scopulorum</i> Woodland	Montane Riparian Forest	G2G3	S2S3	Yes
24963	<i>Populus angustifolia</i> - <i>Juniperus scopulorum</i> Woodland	Montane Riparian Forest	G2G3	S2S3	Yes

## REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
198290	Culver, D.R., D. Malone, S.L. Neid, and J. Handwerk. 2009. Final Report: Survey of Critical Biological Resources in Chaffee County. Colorado Natural Heritage Program, Fort Collins, CO.
198293	Karnuta, T. 1995. Road and Riverside Geology of the Upper Arkansas Valley. Geotechnics. Salida, CO.

## ADDITIONAL TOPICS

## Additional Topics

No Data

## VERSION

Version Date 05/02/1997

Version Author Kittel, G.M.

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