

Level 4 Potential Conservation Area (PCA) Report

Name Flathead Canyon

Site Code S.USCOHP*27114

IDENTIFIERS

Site ID 2475 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 370259N
State Colorado Longitude 1032313W

Quad Code Quad Name
37103-A4 Jesus Canyon

County
Las Animas (CO)

Watershed Code Watershed Name
11040001 Cimarron headwaters

SITE DESCRIPTION

Minimum Elevation	5,200.00 Feet	1,584.96 Meters
Maximum Elevation	5,760.00 Feet	1,755.65 Meters

Site Description

Flathead Canyon is a deep walled canyon with striking cliffs that in some places are 300 feet high. The views from the cliffs are spectacular. The canyon is characterized by rocky boulder-strewn steep slopes with a canyon floor of perennial and annual grasses that are subject to seasonal spring flooding and flooding from summer rains. Soils are of shallow eolian sediments and material weathered from sandstone. The canyon slopes are vegetated with shrublands or woodlands in most areas, but with benches where there is a mosaic of grasslands and woodlands. The dominate vegetation is juniper woodland and some of the steeper canyon slopes are covered with shrubs, generally mountain mahogany (*Cercocarpus montanus*), although Gambel's oak (*Quercus gambelii*) is also common. Two state rare amphibians populate the pools and springs of the canyon bottom; the canyon tree frog (*Hyla arenicolor*) and the plains leopard frog (*Rana blairi*).

Key Environmental Factors

Maintaining the integrity of the hydrology in the canyon, both the surface and groundwater flows, to assure natural recharge of the intermittent pools of the canyon bottom is important to the viability of the rare amphibian populations. Any changes in the hydrologic regime causing a decline in surface waters, like water diversions or pumping of surface and groundwater, would be detrimental to the continued viability of the amphibian population.

Climate Description

The climate is semi-arid with precipitation averaging about 14 inches per year. About half of the yearly precipitation is received during the months of May through August. Winter average minimum temperatures are in the range of 16-20 °F, and summer average maximum temperatures in July and August are near or above 90 °F (HPRCC 2008).

Land Use History

The area has been inhabited by people for as long as 5,000 years, particularly areas further east within the Purgatoire Canyon. Apparently many native tribes lived in or visited the area. The site is within the vicinity of the Santa Fe Trail and by the early 1840s traders and Spanish emigres colonized the canyons and brought ranching to the area. Ranching was the dominant force until 1909 when dry-land-farming homesteaders fenced the land. The 1920s and 1930s brought the "Dust Bowl" and many abandoned their homes, leaving the area to sheep and cattle ranchers. While sheep grazing was discontinued in the 1950s, livestock continued to dominate. The creation of the Pinon Canyon Maneuver Site in the 1980s meant the end of grazing over a large portion of the area, while private lands continue to be grazed (Friedman 1985).

Cultural Features

No Data

SITE DESIGN

Site Map Y - Yes Mapped Date 04/04/2008

Level 4 Potential Conservation Area (PCA) Report

Name Flathead Canyon

Site Code S.USCOHP*27114

Designer Sovell, J.R.

Boundary Justification

The boundary was drawn for the canyon tree frog and plains leopard frog. It extends for approximately 2 miles down canyon into areas that have not been surveyed, but that contain suitable habitat. The canyon slopes and parts of the escarpment are also included to help protect the uplands from disturbance and erosion. Although this site incorporates the element occurrences and additional suitable habitat, management at the watershed scale is important to protect a greater proportion of the groundwater recharge area believed necessary to maintain the surface flows, seeps, and springs that supply water to the pools, which support the amphibian population.

Primary Area 689.62 Acres 279.08 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B5: General Biodiversity Interest

Biodiversity Significance Comments

The site supports an extant occurrence of the state rare (G5/S2) canyon treefrog (*Hyla arenicolor*) and the state rare (G5/S3) plains leopard frog (*Rana blairi*).

Other Values Rank No Data

Other Values Comments

No Data

LAND MANAGEMENT ISSUES

Land Use Comments

Ranching is the current use of the land and cattle grazing currently occurs on adjacent land. The site itself is inaccessible to cattle and is ungrazed.

Natural Hazard Comments

The juniper uplands include steep slopes and cliffs and safety should be considered when hiking within these areas.

Exotics Comments

No Data

Offsite

No Data

Information Needs

Additional information on the size and extent of the amphibian population would assist with management of the population. Inventory the remaining area of the canyon to determine the population sizes of the two amphibians.

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>
19160	<i>Hyla arenicolor</i>	Canyon Treefrog	G5	S2	Yes
21637	<i>Rana blairi</i>	Plains Leopard Frog	G5	S3	Yes

REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
195120	Friedman, Paul D. 1985. Final Report of History and Oral History Studies of the Fort Carson Pinon Canyon Maneuver Area, Las Animas, Colorado. USDI. National Park Service, Interagency Archaeological Services Branch, Rocky Mountain Regional Office, Denver, CO.
195121	HPRCC. 2008. High Plains Regional Climate Center Web Page. Based on data from automated weather stations operated by Colorado for southeastern Colorado area. High Plains Regional Climate Center Web Page: < http://www.hprcc.unl.edu >
195097	Stevens, J., J. Sovell, D. Culver, K. Decker, L. Grunau, A. Lavender, and C. Gaughan. 2008. Final Report: Southeastern Colorado Survey of Critical Biological Resources 2007. Colorado Natural Heritage Program, Fort Collins, CO.

Level 4 Potential Conservation Area (PCA) Report

Name Flathead Canyon

Site Code S.USCOHP*27114

ADDITIONAL TOPICS

Additional Topics

No Data

VERSION

Version Date 04/04/2008

Version Author Sovell, J.R.

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