

# Level 4 Potential Conservation Area (PCA) Report

Name Goose Creek-Mineral County

Site Code S.USCOHP\*15689

## IDENTIFIERS

Site ID 951 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 374303N  
 State Colorado Longitude 1065013W

<u>Quad Code</u>	<u>Quad Name</u>
37106-G7	Wagon Wheel Gap
37106-F7	Lake Humphreys

### County

Mineral (CO)

<u>Watershed Code</u>	<u>Watershed Name</u>
13010001	Rio Grande headwaters

## SITE DESCRIPTION

<b>Minimum Elevation</b>	8,480.00	<b>Feet</b>	2,585.00	<b>Meters</b>
<b>Maximum Elevation</b>	9,600.00	<b>Feet</b>	2,926.00	<b>Meters</b>

### Site Description

The Goose Creek site can easily be divided into two sections, the Humphrey's Ranch and 4UR Ranch. The Humphrey's Ranch is the upper elevation portion and includes two large lakes. In 1923 the Browns built a concrete dam on Goose Creek for Lake Humphreys. An earthen dam for Hay Press Lake was built many years later. These two lakes are used primarily for private fishing and other recreation. The Division of Wildlife stocks Lake Humphrey's with rainbow trout, which add to the already existing population of non-native brook trout and hybrid Rio Grande cutthroat and rainbow trout known as "cutbows." Upstream of Hay Press Lake and Lake Humphreys is a small man-made pond known locally as "Walden Pond." It is here that a dense and healthy population of Rio Grande Chub was documented. The most likely explanation for this disjunct population is an introduction by a fisherman, since chub are known to be used as bait fish (John Alves, pers. Com.-DOW). Another smaller and ephemeral bermed pond is beside the Roaring Fork River. This 100 x 100 m pond had a healthy population of salamanders. The surrounding landscape to all of the ponds and lakes is that of an idyllic montane steep valley. A mosaic of aspen (*Populus tremuloides*) and Engelmann spruce (*Picea engelmannii*) dominate the slopes, with occasional rhyolitic cliffs jutting out. On the cliffs or rock outcrops we found small populations of black canyon gilia (*Gilia penstemonoides*). A few drier, south-facing slopes are dominated by Arizona fescue (*Festuca arizonica*) grasslands with isolated stands of bristlecone pine (*Pinus aristata*). Bill Dooley, the Humphrey's Ranch manager, reported that boreal toads were common along upper Goose Creek in "his younger days," but that they have been gone for many years now. At the end of August 1998 he found one adult boreal toad on his doorstep. The Humphrey's Ranch has been maintained since 1920's as a family/friends fishing-vacation resort. A two-track dirt road and several cabins border the western side of Lake Humphrey's. Past structures included a tennis court, golf course, and swimming pool. They currently have approximately 12 horses. This property is sandwiched between the Weminuche Wilderness Area and the 4UR Ranch. The 4UR Ranch lies downstream of the Humphrey's Ranch and has been a fly fishing resort and guest ranch since the 1940's. This portion of Goose Creek has formed a wide and gently sloping valley oriented south to north. Although much of the valley bottom is currently an irrigated hay meadow, it was probably once willow and sedge dominated. The upper stretches are narrower and dominated by a montane riparian forest of Engelmann spruce and alder *Alnus incana*). The hillsides are either Engelmann spruce or Arizona fescue grasslands with patches of bristlecone pine throughout. Immediately above the floodplain along the lower mile of Goose and Pierce Creeks is a small but very important strip of shortgrass prairie exists on the east-facing gentle colluvial slopes. The two-track dirt road that parallels Goose and Pierce Creeks passes through this limited habitat. Yearly stocking with rainbow and Snake River cutthroat trout provides the guests with ample fishing opportunities. Six years ago the ranch eliminated most of their cattle, but maintains a herd of 30 horses and four longhorns. In 1990, livestock were fenced out of a narrow zone along Goose Creek. In addition, rocks were placed in the stream to interrupt the current and provide resting places for trout. Historic land uses included a school and a fluorspar mine, both still visible. Currently

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the fishing resort supports cabins, tennis courts, a pool, and other amenities for their guests. A two-track dirt road parallels the floodplain. The area is reported to be used by over 400 wintering elk.

## Key Environmental Factors

No Data

## Climate Description

No Data

## Land Use History

No Data

## Cultural Features

No Data

## SITE DESIGN

Site Map Y - Yes

Mapped Date 12/10/1998

Designer Rondeau, R.J.

## Boundary Justification

Includes the entire occurrence of *Potentilla* and a small buffer. The Goose Creek site boundary includes all of the occurrences listed in this site. It also includes suitable nearby habitat that has not been thoroughly inventoried, but is likely to include many of the elements of concern. The boundary was based on referencing the 7.5 minute topographic maps and an on-the ground-survey.

Primary Area 1,556.18 Acres

629.77 Hectares

## SITE SIGNIFICANCE

Biodiversity Significance Rank B3: High Biodiversity Significance

## Biodiversity Significance Comments

B-ranked occurrence of *Potentilla ambigens*. The Goose Creek site contains a small strip of shortgrass prairie that harbors the largest known occurrence of the globally imperiled Southern Rocky Mountain cinquefoil (*Potentilla ambigens*). The lakes on the Humphrey's Ranch provide an introduced, yet important, brood stock for the declining fish species: Rio Grande chub (*Gila pandora*) and Rio Grande cutthroat trout (*Oncorhynchus clarki virginalis*). The Goose Creek site includes the largest known population of the Southern Rocky Mountain cinquefoil (*Potentilla ambigens*). This member of the buttercup family is restricted to Wyoming, Colorado, and New Mexico. It has been found only once in Wyoming, while it has been found in four counties in both Colorado and New Mexico (Colorado Natural Heritage Program 1998). Only a few of the documented occurrences note numbers of individuals: two plants in Larimer County, 50 to 100 in El Paso County, and thousands in Mineral County. Goose Creek and the adjacent Bellows Creek site harbor the largest known population with 2000 and 500 plants respectively. Of special interest is the fact that over 90% of the habitat for the Southern Rocky Mountain cinquefoil on these two sites is privately owned. The Rio Grande chub (*Gila pandora*) and cutthroat trout, (*Oncorhynchus clarki virginalis*) both endemic to the Rio Grande basin, have declined in both numbers of individuals as well as number of locations since the early 1900's (Colorado Natural Heritage Program 1997). The DOW actively manages for both species and currently stocks suitable streams with both of these species. Although Goose Creek probably never had Rio Grande chub, the "Walden Pond" population is an important brood stock for DOW reintroduction plans. Goose Creek probably had a native population of cutthroat trout, but currently it is only the introduced population in Hay Press Lake that remains viable. This population is an important brood stock for repatriating Rio Grande valley streams.

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

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## Offsite

No Data

## Information Needs

No Data

### 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>			
22568	<i>Potentilla ambigens</i>	southern Rocky Mountain cinquefoil	G3	S1S2	Yes
24518	<i>Picea pungens</i> / <i>Alnus incana</i> Woodland	Montane Riparian Forests	G3	S3	Yes
23498	<i>Gilia penstemonoides</i>	Black Canyon gilia	G3	S3	No
20205	<i>Oncorhynchus clarkii virginalis</i>	Rio Grande Cutthroat Trout	G4T3	S3	No
20205	<i>Oncorhynchus clarkii virginalis</i>	Rio Grande Cutthroat Trout	G4T3	S3	No
19189	<i>Gila pandora</i>	Rio Grande Chub	G3	S1?	No
20351	<i>Bufo boreas</i> pop. 1	Boreal Toad (Southern Rocky Mountain Population)	G4T1Q	S1	No

### REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
-	No Data

### ADDITIONAL TOPICS

#### Additional Topics

No Data

### VERSION

<b>Version Date</b>	12/10/1998
<b>Version Author</b>	Rondeau, R.J.

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