

# Level 4 Potential Conservation Area (PCA) Report

Name Burro Bridge Iron Fen

Site Code S.USCOHP\*23595

## IDENTIFIERS

Site ID 1988 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 375048N  
State Colorado Longitude 1074341W

### Quad Code Quad Name

37107-G6 Silverton

### County

San Juan (CO)

### Watershed Code Watershed Name

14080104 Animas

## SITE DESCRIPTION

<b>Minimum Elevation</b>	9,820.00	<b>Feet</b>	2,993.00	<b>Meters</b>
<b>Maximum Elevation</b>	9,860.00	<b>Feet</b>	3,005.00	<b>Meters</b>

### Site Description

The Burro Bridge Iron Fen is located at the confluence of Mineral Creek and the Middle Fork of Mineral Creek on the lower east wall of the canyon. Mineral Creek flows along a fault zone through quaternary glacial deposits at the west edge of the Silverton Caldera. To the north, Mineral Creek follows the trace of the caldera rim faults. The highly altered Henson and Burns Formations make up the valley wall east of the fault zone and lower third of the west valley wall. The upper two-thirds of the west valley wall are the San Juan Formation, derived from ancient volcanoes located northeast of Silverton, and a sequence of rhyolite ash flows, including the Ute, Blue Mesa, and Sapinero Mesa Tuffs. Mineral Creek at the Burro Bridge Iron Fen is composed of red rocks and large colluvial boulders in the creek bed. Springs emerge from a truncated alluvial fan emerging from the first drainage south of Browns Gulch on the east side of Mineral Creek canyon. The drainage provides both substrate and iron-rich water that has created limonite ledges. The limonite ledges at Burro Bridge Iron Fen are the most extensive observed in San Juan County and in Colorado by CNHP. As is common with other iron fens, Burro Bridge is dominated by acid-tolerant shrubs with a thick ground cover of a variety of Sphagnum and other mosses. Engelmann spruce (*Picea engelmannii*) dominates the tree layer. Bog birch (*Betula glandulosa*) and dwarf blueberry (*Vaccinium cespitosum*) dominate the shrub layer. Mosses, bluejoint (*Calamagrostis canadensis*), water sedge (*Carex aquatilis*), and alpine spicy wintergreen (*Gaultheria humifusa*) dominate the herbaceous layer. Dr. David Cooper at Colorado State University documented the fruticosa lichen *Cladonia rangiferina* at Burro Bridge Iron Fen. This lichen is common on the margins of Burro Bridge Iron Fen in the Engelmann spruce forest. The lichen is common in the boreal forest region, however the nearest location to Colorado is in northern Montana.

### 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 12/17/2002

Designer Culver, D.R.

### Boundary Justification

The boundary is drawn to include Mineral Creek and Middle Fork of Mineral Creek floodplain and slopes below the steep cliffs, which rise on both sides of the river. The boundaries incorporate an area that will allow

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natural hydrological processes such as seasonal flooding, sediment deposition, and new channel formation to maintain viable populations of the wetland. It should be noted that the hydrological processes necessary to the riparian elements are not fully contained by the site boundaries. Given that the elements are dependent on natural hydrological processes associated with Mineral Creek and its Middle Fork, any upstream activities such as water diversions, impoundments, and mining development could potentially be detrimental to the wetland. This boundary indicates the minimum area that should be considered for any conservation management plan.

Primary Area 75.01 Acres 30.36 Hectares

## SITE SIGNIFICANCE

Biodiversity Significance Rank B2: Very High Biodiversity Significance

### Biodiversity Significance Comments

This site supports an excellent (A-ranked) occurrence of a globally imperiled (G2/S2) plant community. Currently there are only 15 iron fens known globally, five of which occur in San Juan County.

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

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>			
24847	( <i>Picea engelmannii</i> ) / <i>Betula nana</i> / <i>Carex aquatilis</i> - <i>Sphagnum angustifolium</i> Woodland	Iron Fen	G2	S2	Yes

## REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
158301	Culver, D.R. and P. Lyon. 2002. Colorado Natural Heritage Program Field Survey to San Juan County.
163571	Lyon, P. and D. Culver. 2002. Colorado Natural Heritage Program Field Surveys.

## ADDITIONAL TOPICS

### Additional Topics

No Data

## VERSION

Version Date 12/17/2002

Version Author Culver, D.R.

## Disclaimer

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