

# Level 4 Potential Conservation Area (PCA) Report

Name Grindstone Fens

Site Code S.USCOHP\*25377

## IDENTIFIERS

Site ID 2204 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 373129N  
State Colorado Longitude 1080322W

Quad Code Quad Name  
37108-E1 Orphan Butte

County  
Montezuma (CO)

Watershed Code Watershed Name  
14030002 Upper Dolores

## SITE DESCRIPTION

Minimum Elevation	10,920.00 Feet	3,328.42 Meters
Maximum Elevation	11,200.00 Feet	3,413.76 Meters

### Site Description

The Grindstone fens occupy a series of depressions and benches in the uppermost part of the Rough Canyon branch of Roaring Fork Creek. Rough Canyon drains to the Dolores River in Montezuma County of southwestern Colorado. The valley is cut through flat-lying layers of Dakota sandstone, Morrison Formation, Entrada sandstone and Dolores Formation. Below the site, red sandstone and shale cliffs form a spectacular canyon. The topography of the area is formed primarily of landslide debris and is rolling and rocky. The surrounding vegetation was formerly upper sub-alpine wet spruce-fir forest, but was logged approximately 40 years ago. The site includes over 30 individual wetlands, representing several different types. Several wetlands have pools, floating mats and a flora unique to that particular habitat. This site represents an excellent collection of diverse wetlands concentrated in a small area (CNAP 2000). The area supports a dense cover of mosses and lichens under the dominant sedge community. About 10% of the area is occupied by forbs, including star gentian, elephantella, tufted hairgrass, rough bentgrass and king's crown (*Swertia perrenis*, *Pedicularis groenlandica*, *Deschampsia caespitosa*, *Agrostis scabra* and *Rhodiola integrifolia*.) Altai cottongrass (*Eriophorum altaicum* var. *neogaeum*) was found here in 1999. The species is known to occupy at least four of the fens, and possibly more (Stewart, pers. comm.). Bladderwort (*Utricularia minor*) was found to be fairly common in shallow water in one fen, and although it is expected in others, this has not been confirmed. Two other state-rare species, lesser panicled sedge (*Carex diandra*) and mud sedge (*Carex limosa*) have also been observed here, but details are not known at this time. Other plants of interest include Sphagnum mosses (*Sphagnum* spp.), bog buckbean (*Menyanthes trifoliata*) and dwarf burr-reed (*Sparganium minimum*). Grindstone wetlands may also provide important foraging habitat for two state-rare birds, the Long-billed Curlew (*Numenius americanus*) and the Mountain Plover (*Charadrius montanus*), known to breed in areas near the site (CNAP 2000).

### Key Environmental Factors

No Data

### Climate Description

No Data

### Land Use History

No Data

### Cultural Features

No Data

## SITE DESIGN

Site Map P - Partial Mapped Date 12/08/2004  
Designer Lyon, M.J.

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## Boundary Justification

The boundary is drawn to include the Altai cottongrass (*Eriophorum altaicum* var. *neogaeum*) occurrence, as well as several other wetlands in the vicinity, where the species could become established in the future. Included within this complex of fens are those that support bladderwort (*Utricularia minor*). The boundaries incorporate land that displays several processes, such as landslide terrace development, pond infilling and solifluction. Although there is no sign of recent landslide activity, such processes have shaped the wetlands at this site and could be a source of natural disturbance in the future (CNAP 2000).

Primary Area 979.43 Acres 396.36 Hectares

## SITE SIGNIFICANCE

Biodiversity Significance Rank B5: General Biodiversity Interest

## Biodiversity Significance Comments

This site is drawn for a fair occurrence (C-ranked) of the Altai cottongrass (*Eriophorum altaicum* var. *neogaeum*) a plant subspecies which is vulnerable in the state (T3T4/S3), and for an unranked occurrence of bladderwort (*Utricularia minor*) which is imperiled (G5/S2) in Colorado. Further survey of this site should enable better evaluation of these occurrences and could lead to changing the site rank.

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

Need information on lesser panicked sedge (*Carex diandra*) population to delineate element occurrence.

## 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>
18494	<i>Utricularia minor</i>	lesser bladderwort	G5	S2	Yes
21874	<i>Eriophorum altaicum</i> var. <i>neogaeum</i>	Altai cottongrass	G4?T3T4	S3	Yes

## REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
192795	Carsey, K. and K. Decker. 1999a. Identification and Evaluation of Wetlands of Statewide Significance in Colorado. Report prepared for Colorado Department of Natural Resources and U.S. Environmental Protection Agency by the Colorado Natural Areas Program, Denver, Colorado.
192796	Carsey, K., J. Coles, K. Decker, and R. Fenwick. 1999b. Identification and Evaluation of Wetlands of Statewide Significance in Colorado. Report prepared for Colorado Department of Natural Resources and U.S. Environmental Protection Agency by the Colorado Natural Areas Program, Denver, Colorado.
192772	Lyon, M.J. 2005. Final Report: Survey of Rare Plants. San Juan Public Lands in Dolores and Montezuma counties, Colorado. Colorado Natural Heritage Program, Fort Collins, CO.

## ADDITIONAL TOPICS

## Additional Topics

No Data

## VERSION

Version Date 12/08/2004

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Version Author Lyon, M.J.

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