

Level 4 Potential Conservation Area (PCA) Report

Name Jim Creek Trail

Site Code S.USCOHP*25933

IDENTIFIERS

Site ID 2311 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 395148N
State Colorado Longitude 1054229W

Quad Code Quad Name

39105-G6 Empire

County

Grand (CO)

Watershed Code Watershed Name

14010001 Colorado headwaters

SITE DESCRIPTION

Minimum Elevation	10,280.00 Feet	3,133.34 Meters
Maximum Elevation	10,345.00 Feet	3,153.16 Meters

Site Description

This association occurs as multiple slope fens along the upper reaches of Jim Creek drainage. Geology consists of unconsolidated surficial deposits and rocks of the Quaternary Age, specifically glacial drift of the Pinedale and Bull Lake glaciations. Vegetation is dominated by herbaceous species throughout with some encroaching diamondleaf willow (*Salix planifolia*) and Engelmann spruce (*Picea engelmannii*) along edges. Water sedge (*Carex aquatilis*) and fewflower spikerush (*Eleocharis quinqueflora*) are the most common species. Other graminoids present include beaked sedge (*Carex utriculata*), rough bentgrass (*Agrostis scabra*), bluejoint reedgrass (*Calamagrostis canadensis*), and tufted hairgrass (*Deschampsia caespitosa*). Forbs present include elephanthead lousewort (*Pedicularis groenlandica*), white marsh marigold (*Caltha leptosepala*), Rocky Mountain hemlockparsley (*Conioselinum scopulorum*), and scentbottle (*Platanthera dilatata* var. *albiflora*). Soils consist of fibric to hemic peats and are inundated throughout. Disturbances are limited to elk browsing and spring flooding from adjacent stream. There are no recent anthropogenic disturbances. Surrounding uplands are dominated by Engelmann spruce, subalpine fir (*Abies lasiocarpa*), lodgepole pine (*Pinus contorta*) mixed, mature forests that appear to be very healthy forming a stable, continuous ecosystem throughout the drainage.

Key Environmental Factors

Key environmental factors include spring flooding, perennial groundwater discharge, high groundwater levels, organic soil structure, gentle slope, wind protection by steep adjacent slopes, and extreme temperatures.

Climate Description

Climate likely follows typical Colorado weather patterns being generally xeric throughout the year with wet spring seasons and late summer "monsoons".

Land Use History

Site occurs adjacent to an old homestead that is no longer inhabited and may have been used as a hunting camp, but would have been difficult to use year-round because of extreme temperatures.

Cultural Features

No Data

SITE DESIGN

Site Map Y - Yes Mapped Date 11/27/2005
Designer Jones, J.R.

Boundary Justification

Boundary is drawn to include portions of upper Jim Creek and hydrologic processes that help maintain site hydrology including surface flows and groundwater discharge and recharge. Boundaries also include some buffered uplands, but do not include all ecological processes important to the site. Activities such as

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development, water diversion, and improper grazing could be detrimental to site hydrology and biota.

Primary Area 36.40 Acres

14.73 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B4: Moderate Biodiversity Significance

Biodiversity Significance Comments

This site is drawn for an excellent (A-ranked) occurrence of a globally demonstrably secure (G5/S4) water sedge (*Carex aquatilis*) herbaceous vegetation plant community.

Other Values Rank V2 - High values

Other Values Comments

The area provides recreational and open space for residents with a good trail along the lower reaches of the drainage and is important to the general aesthetics of the Berthoud Pass area. It is also very important as a head water tributary of the Fraser and Colorado Rivers although all of the water from Jim Creek is channeled through an aqueduct to the Moffat Tunnel. The site provides habitat for a variety of wildlife species and surrounding forests are rich, healthy old-growth.

LAND MANAGEMENT ISSUES

Land Use Comments

The dominant land use of this drainage is for recreational purposes. Drainage supports old growth forests and does show evidence of logging in the past 100 years. Lower portions of the trail were formerly a maintained road, but are now maintained for non-vehicular use. In order to develop the private property upstream of the site, the property owner would need permission to use motor vehicles along the old road.

Natural Hazard Comments

Avalanche danger is likely high during the fall, winter, and spring seasons due to the severity of adjacent slopes.

Exotics Comments

The area currently supports no exotic species along the upper reaches of the trail. Lower reaches of trail, not included in the site, support some non-natives including timothy (*Phleum pratense*) and oxeye daisy (*Leucanthemum vulgare*).

Offsite

The most prevalent off-site land use is dewatering of Jim Creek at the trailhead. At this point, water is diverted from its course towards the confluence with the Fraser River and fed into the Moffat Tunnel Aqueduct which provides water for agricultural and municipal needs along the Front Range. Approximately 300 acres of land upstream of the site is privately owned. The owner has the intentions of developing the property as a homesite, but must first secure right-of-way by the Forest Service to do so.

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>			
22745	<i>Carex aquatilis</i> Herbaceous Vegetation	Montane Wet Meadows	G5	S4	Yes

REFERENCES

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<u>Reference ID</u>	<u>Full Citation</u>
160903	Carsey, K., D. Cooper, K. Decker, D. Culver, and G. Kittel. 2003. Statewide wetlands classification and characterization: Wetland plant associations of Colorado. Prepared for Colorado Department of Natural Resources, Denver, CO by Colorado Natural Heritage Program, Fort Collins, CO.
193632	Culver, D.R. and Jones, J.R. 2006. Final Report: Survey of Critical Biological Resources in Grand County. Colorado Natural Heritage Program, Fort Collins, CO.
160140	Dorn, R. D. 1997. Rocky Mountain Region Willow Identification Field Guide. Renewable Resources R2-RR-97-01. Denver, CO: USDA, Forest Service, Rocky Mountain Region. 107p.
167224	Hurd, E.G., N.L. Shaw, J. Mastroguiseppe, L.C. Smithman, and S. Goodrich. 1998. Field Guide to Intermountain Sedges. U.S. Department of Agriculture, Rocky Mountain Research Station, Ogden, UT.
193578	NatureServe. 2005. NatureServe Explorer: An online encyclopedia of life [web application]. Version 4.6. NatureServe, Arlington, Virginia. Available http://www.natureserve.org/explorer . (Accessed: December 8, 2005).
193635	Sumerlin, Doreen. 2005. Wildlife Biologist, U.S. Forest Service. Personal communication to Jennifer Jones of the Colorado Natural Heritage Program.
192747	Tweto, O. 1979. Geologic Map of Colorado, 1:500,000. United States Geological Survey, Department of Interior, and Geologic Survey of Colorado, Denver, CO.
193553	USDA, NRCS. 2005. The PLANTS Database, Version 3.5 (http://plants.usda.gov). Data compiled from various sources by Mark W. Skinner. National Plant Data Center < http://npdc.usda.gov/ >, Baton Rouge, LA 70874-4490 USA. Accessed 2005.
172684	Weber, W.A. and R.C. Wittmann. 2001. Colorado Flora: Western Slope, Third Edition. University Press of Colorado, Niwot, CO.

ADDITIONAL TOPICS

Additional Topics

No Data

VERSION

Version Date 11/27/2005

Version Author Jones, J.R.

Disclaimer

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