

Level 4 Potential Conservation Area (PCA) Report

Name South Fork of Ranch Creek

Site Code S.USCOHP*25912

IDENTIFIERS

Site ID 2297 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 395357N
State Colorado Longitude 1054341W

Quad Code Quad Name

39105-H6 East Portal

County

Grand (CO)

Watershed Code Watershed Name

14010001 Colorado headwaters

SITE DESCRIPTION

Minimum Elevation	10,050.00	Feet	3,063.24	Meters
Maximum Elevation	10,300.00	Feet	3,139.44	Meters

Site Description

Site occurs along the South Fork of Ranch Creek, a second order tributary of the Fraser River. The creek is a type A stream along this section. Geology consists of metamorphic rocks of the Precambrian Age, specifically biotitic gneiss, schist, and migmatite. Soils are xeric and rocky throughout. Upland areas are saturated with a moderate organic component along wetland areas. Surrounding forests are dominated by lodgepole pine (*Pinus contorta*), Engelmann spruce (*Picea engelmannii*), and subalpine fir (*Abies lasiocarpa*) with short shrub understories of kinnikinnick (*Arctostaphylos uva-ursi*) or whortleberry (*Vaccinium* sp.). Drainage is dominated by Engelmann spruce and subalpine fir with mesic forbs in the understory. Open meadow along lower reaches of drainage is dominated by a diamondleaf willow (*Salix planifolia*) and water sedge (*Carex aquatilis*) community. Soils are saturated to inundated throughout this area. Moonworts (*Botrychium* sp.) found along the train truss adjacent to road include lanceleaf moonwort (*Botrychium lanceolatum*) which is most common, western moonwort (*Botrychium hesperium*) and reflected moonwort (*Botrychium echo*) which was least common. The location of the moonwort populations is constantly disturbed due to severity of slope and sloughing. Common herbaceous species occurring with the moonwort include Virginia strawberry (*Fragaria virginiana*), Mt. Albert goldenrod (*Solidago simplex* var. *nana*), and rosy pussytoes (*Antennaria rosea*). Disturbances include old train truss, adjacent/upstream road, camp sites, and parking area for nearby trail. Area sees heavy use during the summer months.

Key Environmental Factors

Key environmental factors contributing to the biota of the site include spring flooding, elevation, perennial surface flows, and slope. Anthropogenic disturbances appear to impact the moonworts.

Climate Description

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

Land Use History

The area was used as the first route through the Rockies from Denver to Salt Lake during the late 1800's, early 1900's. There is still evidence of the town of Corona that was established at the top of the pass to aid trains and crews and later tourists visiting the area. The site was abandoned in the mid 1900's after the Moffat Tunnel was built.

Cultural Features

No Data

SITE DESIGN

Site Map Y - Yes Mapped Date 01/03/2006
Designer Jones, J.R.

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Boundary Justification

The site contains approximately .65 mile of the South Fork of Ranch Creek. Boundaries include buffered uplands and encompass those ecological processes necessary to maintain site biota including seasonal flooding, perennial surface flows, and disturbances such as sloughing of severe slopes. However, boundaries do not include all ecological processes influencing the site and activities upstream and along adjacent slopes such as improper grazing, road maintenance, water diversion, and development may impact site hydrology and biota.

Primary Area 102.82 Acres 41.61 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B4: Moderate Biodiversity Significance

Biodiversity Significance Comments

This site is drawn for an excellent (A-ranked) occurrence of the globally demonstrably secure (G5/S4) community, diamondleaf willow (*Salix planifolia*) / water sedge (*Carex aquatilis*), and fair (C-ranked) occurrences of the globally vulnerable plants, reflected moonwort (*Botrychium echo*) (G3/S3) and western moonwort (*Botrychium hesperium*) (G3G4/S2).

Other Values Rank V3 - Moderate values

Other Values Comments

This site provides moderate other values including open space and recreational sites for camping, hiking, biking, hunting, and fishing. As well, the site is an important wildlife habitat providing perennial water source and seasonal forage.

LAND MANAGEMENT ISSUES

Land Use Comments

Predominant land uses are recreational including camping, hiking, biking, OHV use, fishing, hunting, and site-seeing.

Natural Hazard Comments

No Data

Exotics Comments

Exotic species include white clover (*Trifolium repens*), thistle (*Cirsium* sp.), and possibly Kentucky bluegrass (*Poa pratensis*). Exotic species are not common, but are present along roadways and trails.

Offsite

Off-site considerations include water diversion, adjacent roadway, and recreational uses. These activities may alter hydrology and introduce exotic species.

Information Needs

No Data

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>
24850	<i>Salix planifolia</i> / <i>Carex aquatilis</i> Shrubland	Subalpine Riparian Willow Carr	G5	S4	Yes
22785	<i>Botrychium hesperium</i>	western moonwort	G4	S2	Yes
20475	<i>Botrychium echo</i>	reflected moonwort	G3	S3	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.
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 01/03/2006

Version Author Jones, J.R.

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