

Level 4 Potential Conservation Area (PCA) Report

Name Black Mountain Reservoir

Site Code S.USCOHP*25921

IDENTIFIERS

Site ID 2306 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 400835N
State Colorado Longitude 1061110W

Quad Code Quad Name
40106-B2 Corral Peaks

County
Grand (CO)

Watershed Code Watershed Name
14010001 Colorado headwaters

SITE DESCRIPTION

Minimum Elevation	8,800.00 Feet	2,682.24 Meters
Maximum Elevation	9,550.00 Feet	2,910.84 Meters

Site Description

Community inhabits small, ephemeral tributary of Black Mountain Reservoir. Drainage is a type G stream along this section and is also fed by three small springs observed along its northern slopes and origin above road. Stand is variable in some sections, but is predominantly dominated by a tall shrub layer of thinleaf alder (*Alnus incana*) and Drummond's willow (*Salix drummondiana*). Other willow species present include mountain willow (*Salix monticola*) and greenleaf willow (*Salix lucida* ssp. *caudata*). Tall shrubs and associated mesic species are confined to the small drainage and its springs. The understory is dominated by mesic forb species including tall fringed bluebells (*Mertensia ciliata*), arrowleaf ragwort (*Senecio triangularis*), common cowparsnip (*Heracleum maximum*), and subalpine larkspur (*Delphinium barbeyi*). Uplands are dominated by lodgepole pine (*Pinus contorta*) and subalpine fir (*Abies lasiocarpa*) forests with some quaking aspen (*Populus tremuloides*) and a few small meadow openings. Some adjacent upslopes support invasive species such as smooth brome (*Bromus inermis*) from grazing activities. Soils along the drainage are very sandy throughout with cobbles along the main stream. Geology consists of sedimentary rocks of the Tertiary Age, specifically of the Coalmont Formation. Stream is stable, well-vegetated, sinuous, and supports lots of coarse material for stream dissipation.

Key Environmental Factors

Key environmental factors include perennial surface flows, seasonal flooding, elevated groundwater levels along side slopes, narrow, moderately steep slopes, and rocky soils.

Climate Description

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

Land Use History

The area has been logged and burned within the past fifty years.

Cultural Features

There is evidence of past homesteading.

SITE DESIGN

Site Map Y - Yes Mapped Date 11/25/2005
Designer Jones, J.R.

Boundary Justification

Boundaries are drawn to encompass approximately one mile of this unnamed eastern tributary of upper Corral Creek and include all ecological processes supporting the riparian system such as surface flows, groundwater discharges, and seasonal flooding, as well as areas of adjacent uplands contributing sediment and nutrients to the stream. However, boundaries do not include all ecological processes important to the

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hydrology of the site and activities such as improper grazing, development, and water diversions along adjacent slopes and upstream of the site could be detrimental to the hydrology and species composition of the drainage.

Primary Area 103.23 Acres

41.77 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B3: High Biodiversity Significance

Biodiversity Significance Comments

This site is drawn for a good (B-ranked) occurrence of a globally vulnerable (G3/S3) plant community of thinleaf alder - Drummond's willow (*Alnus incana* - *Salix drummondiana*) montane riparian shrubland.

Other Values Rank V3 - Moderate values

Other Values Comments

Other values include general aesthetics and diversity of riparian vegetation within a relatively xeric, forested area as well as wildlife habitat, surface water recharge for lower reservoir and river, and erosion control during spring and ephemeral high flows.

LAND MANAGEMENT ISSUES

Land Use Comments

Land has been used in the past for logging and grazing. The only uses at present are recreation and hunting.

Natural Hazard Comments

Flooding may cause a potential hazard during spring and ephemeral high flows.

Exotics Comments

Smooth brome is present along adjacent upslopes and may be a result of past grazing practices or other disturbances. Kentucky bluegrass (*Poa pratensis*) occurs in low cover along mesic areas.

Offsite

Off-site considerations include logging of adjacent forests, grazing, and water diversion.

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>
24743	<i>Alnus incana</i> - <i>Salix drummondiana</i> Shrubland	Montane Riparian Shrubland	G3	S3	Yes

REFERENCES

<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.

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ADDITIONAL TOPICS

Additional Topics

No Data

VERSION

Version Date 11/25/2005

Version Author Jones, J.R.

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