

Level 4 Potential Conservation Area (PCA) Report

Name First Creek

Site Code S.USCOHP*25976

IDENTIFIERS

Site ID 2324 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 400747N
State Colorado Longitude 1060929W

Quad Code Quad Name

40106-A2 Parshall
40106-B2 Corral Peaks

County

Grand (CO)

Watershed Code Watershed Name

14010001 Colorado headwaters

SITE DESCRIPTION

Minimum Elevation	9,200.00	Feet	2,804.16	Meters
Maximum Elevation	9,725.00	Feet	2,964.18	Meters

Site Description

Communities inhabit about 0.85 mile of First Creek and two small, perennial seeps along an eastern drainage. First Creek is a small, first order tributary of Corral Creek and seeps feed into the Smith Creek drainage. Hydrology originates along the southern slopes of Grouse Mountain. The First Creek area is dominated by a tall shrub layer of thinlinef alder (*Alnus incana*) and Drummond's willow (*Salix drummondiana*). Willow and alder are large, healthy, and consistent throughout. There are some encroaching canopy species including subalpine fir (*Abies lasiocarpa*), Engelmann spruce (*Picea engelmannii*), and quaking aspen (*Populus tremuloides*). The understory layer is dominated by mesic forbs including brook saxifrage (*Saxifraga odontoloma*), common cowparsnip (*Heracleum maximum*), Columbian monkshood (*Aconitum columbianum*), and tall fringed bluebells (*Mertensia ciliata*). Stream banks are well-vegetated and stable throughout with good amounts of coarse materials. Soils are composed of sandy clays. Smith Creek seeps are dominated by a tall shrub layer of thinlinef alder (*Alnus incana*). Alder are very robust and mature with many large diameter stems and new lateral stems indicating the water source has been consistent for many years. Species composition throughout suggests a perennial water source with the majority of the species being facultative wetland species. The understory is dominated by mesic forbs including Columbian monkshood (*Aconitum columbianum*), common cowparsnip (*Heracleum maximum*), threepetal bedstraw (*Galium trifidum*), and brook saxifrage (*Saxifraga odontoloma*), and heartleaf bittercress (*Cardamine cordifolia*). Graminoids present include bluejoint reedgrass (*Calamagrostis canadensis*) and smallflowered woodrush (*Luzula parviflora*). Saturated soils in seep areas are silty clays up to 40+ cm. The lodgepole pine in surrounding uplands show signs of beetle infestation and may need to be removed or thinned in the future. Disturbances include game use for bathing and watering, road proximity, and signs of past logging. The areas likely see heavy use during the fall hunting season. Geology consists of sedimentary rocks of the Tertiary Age, specifically Arkosic sandstone, conglomerate, and shale of the Coalmont Formation.

Key Environmental Factors

Key environmental factors driving the species composition include moderate slope, spring flooding, and perennial surface hydrology.

Climate Description

Climate likely follows typical weather patterns 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 homesteaded in the past and cabins are still present. Evidence of past logging exists in adjacent lodgepole pine (*Pinus contorta*) forests.

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Cultural Features

No Data

SITE DESIGN

Site Map Y - Yes

Mapped Date 02/15/2006

Designer Jones, J.R.

Boundary Justification

Boundaries are drawn to encompass approximately one mile of the First Creek tributary of Corral Creek and springs in adjacent Smith Creek drainage. Boundaries include all ecological processes important to the maintenance of site hydrology and biota including surface flows, spring flooding, and groundwater discharge. However, boundaries do not include all ecological processes influencing the site and activities such as improper grazing, road maintenance, development, and water diversion may have a negative impact.

Primary Area 214.39 Acres 86.76 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B3: High Biodiversity Significance

Biodiversity Significance Comments

This site is drawn for a good (B-ranked) occurrence of the globally vulnerable (G3/S3) community, thinleaf alder - Drummond's willow (*Alnus incana* - *Salix drummondiana*) montane riparian shrubland, and a fair (C-ranked) occurrence of the globally vulnerable (G3/S3) community, thinleaf alder (*Alnus incana*) / mesic forb shrubland

Other Values Rank V3 - Moderate values

Other Values Comments

Other values include aesthetics and accessible recreational sites for hiking, camping, and hunting. Area also provides excellent habitat for wildlife being a perennial water source.

LAND MANAGEMENT ISSUES

Land Use Comments

Predominant land uses include recreational activities such as limited hiking, camping, biking, hunting, grazing, and OHV use. As well, the area has been used for logging in the past.

Natural Hazard Comments

Portions of the lower road are clay soils and may be dangerous when wet. There is the possibility of a flooding hazard during spring run-off.

Exotics Comments

There were no exotic species observed, but there is potential for the adjacent road to act as a conduit for exotics along the drainage.

Offsite

Off-site considerations include logging, OHV use, and road maintenance.

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
24645	<i>Alnus incana</i> / Mesic Forbs Shrubland	Thinleaf Alder/Mesic Forb Riparian Shrubland	G3	S3	No

REFERENCES

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Reference ID

Full Citation

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 02/15/2006

Version Author Jones, J.R.

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