

Level 4 Potential Conservation Area (PCA) Report

Name Culebra Creek Montane Complex

Site Code S.USCOHP*25230

IDENTIFIERS

Site ID 2168 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 371204N
State Colorado Longitude 1051438W

<u>Quad Code</u>	<u>Quad Name</u>
37105-B2	El Valle Creek
37105-A3	La Valley
37105-B3	Taylor Ranch
37105-C2	Trinchera Peak
37105-C3	Ojito Peak

County

Costilla (CO)

<u>Watershed Code</u>	<u>Watershed Name</u>
13010002	Alamosa-Trinchera

SITE DESCRIPTION

Minimum Elevation	9,000.00	Feet	2,743.20	Meters
Maximum Elevation	12,000.00	Feet	3,657.60	Meters

Site Description

The site is a complex of aspen forest and montane grassland in a larger matrix of spruce - fir forest. The montane landscape is crossed by several streams, some of which pass through steep valleys. A wide range of elevations, slopes, and aspects are represented in this site. The grasslands occur on what appear to be the driest south-facing slopes. The aspen forests are also primarily south-facing, but they cover more aspects, are mostly above the grasslands, and they extend to higher elevations. Very few aspen have been cut. The site is noteworthy because this is among the largest examples of this type of forest in the Sangre de Cristo Range, and because of the extensive grasslands. The grasslands-dominated by mountain muhly-are the first and largest examples of this type recorded in the CNHP database for Colorado as of 2004. The aspen stands have few to no conifers, so they will persist on the landscape much longer than the mixed spruce - fir - aspen forests to the south. The site has an extensive network of roads that were used to cut large trees in the spruce-fir forest, and nearly all of the spruce - fir stands have been moderately to heavily cut. Despite the logging, this site has great restoration potential and is valuable because it is a large tract of land under single ownership. Also, the site occurs in a region where extensive landscapes have been protected, from the Vermejo Park Ranch on the south through the Great Sand Dunes National Park, the Medano-Zapata Ranch, and US Forest Service land to the north. To the east is the Bar NI ranch (under conservation easement) and several other large parcels with some level of protection.

Key Environmental Factors

Fire plays an important role in maintaining aspen forests on the Southern Rocky Mountain landscape.

Climate Description

No Data

Land Use History

No Data

Cultural Features

No Data

SITE DESIGN

Site Map Y - Yes Mapped Date 11/17/2004
Designer Sanderson, J.S.

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Boundary Justification

The site contains the forest and grassland elements of concern plus the matrix forests and the streams that occur between the aspen stands and grasslands. Including some matrix community allows for shifting vegetation and for ecosystem processes, namely fire.

Primary Area 16,969.96 Acres 6,867.53 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B3: High Biodiversity Significance

Biodiversity Significance Comments

This site is drawn for a good (B-ranked) and fair (C-ranked) occurrence of a globally vulnerable (G3G4/S2?) *Muhlenbergia montana* montane grassland. The B-rank has been downgraded from B3 to B4 because insufficient information is known about this grassland in Colorado. This site also includes a fair (C-ranked) occurrence of an apparently globally secure (G4/S4) but regionally noteworthy aspen / common juniper forest (*Populus tremuloides* / *Juniperus communis*).

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

Few exotic plants; those present are mostly along roads. Some roads have been stabilized and planted with a seed mix that contains several exotic plants but no noxious weeds. Rainbow, brown, and brook trout are all present in one or more streams, some of which may also have Rio Grande cutthroat. Rainbow trout can interbreed with cutthroat and alter their genetic composition. Brown and brook trout can outcompete Rio Grande cutthroat under many conditions.

Offsite

No Data

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>
24682	<i>Muhlenbergia montana</i> Herbaceous Vegetation	Mountain Muhly Herbaceous Vegetation	G3G4	S2?	No
24682	<i>Muhlenbergia montana</i> Herbaceous Vegetation	Mountain Muhly Herbaceous Vegetation	G3G4	S2?	Yes
24888	<i>Populus tremuloides</i> / <i>Juniperus communis</i> Forest	Persistent Aspen Forests	G4	S4	No

REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
192614	Sanderson, J.S. 2004. Final Report: Natural Heritage Inventory of the Taylor Ranch. Colorado Natural Heritage Program, Fort Collins, CO.
192608	Wagner, C. 2004. Colorado Division of Wildlife. Personal communication with John Sanderson. Colorado Natural Heritage Program, Fort Collins, CO.

ADDITIONAL TOPICS

Additional Topics

No Data

VERSION

Version Date 11/17/2004
Version Author Sanderson, J.S.

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