

# Level 4 Potential Conservation Area (PCA) Report

Name Cebolla Creek

Site Code S.USCOHP\*5106

## IDENTIFIERS

Site ID 545 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 380248N  
State Colorado Longitude 1070647W

<u>Quad Code</u>	<u>Quad Name</u>
38107-A1	Mineral Mountain
38107-A2	Cannibal Plateau

### County

Hinsdale (CO)

<u>Watershed Code</u>	<u>Watershed Name</u>
14020002	Upper Gunnison

## SITE DESCRIPTION

<b>Minimum Elevation</b>	9,150.00	<b>Feet</b>	2,788.92	<b>Meters</b>
<b>Maximum Elevation</b>	9,820.00	<b>Feet</b>	2,993.14	<b>Meters</b>

### Site Description

The site spans approximately 3 miles along the middle reaches of Cebolla Creek, a third order tributary of the Gunnison River. It is characterized by a narrow riparian corridor confined in many places by canyon walls with a few reaches of open floodplain. General geology consists of igneous rocks of the Tertiary Age, specifically ash-flow tuffs of the main volcanic sequence and pre-ash-flow andesitic lavas, breccias, tuffs, and conglomerates (Steven 1974, Tweto 1979). Soils consist of organic accumulations over silty clay loams and unconsolidated materials with prominent silt and sand components. Surrounding uplands consist of blue spruce (*Picea pungens*), ponderosa pine (*Pinus ponderosa*), and bristlecone pine (*Pinus aristata*) woodlands at lower reaches and Engelmann spruce (*Picea engelmannii*), Douglas-fir (*Pseudotsuga menziesii*), and quaking aspen (*Populus tremuloides*) along middle reaches. Xeric graminoids and short shrubs inhabit woodland openings. Surrounding uplands are used predominantly for recreational activities and livestock grazing. Due to limited access, riparian areas are not extensively altered by grazing. Hydrology along Cebolla Creek is compromised by upstream dams and an adjacent road. Another section of blue spruce and thinleaf alder (*Alnus incana*) woodlands is present along lower reaches of Cebolla Creek on BLM land. The two sections are separated by cultivated hay fields and may have formerly been contiguous. Riparian vegetation is characterized by variable vegetation types and dominant strata throughout including areas of closed canopy layers, open canopy with consistent tall shrub cover, and open tall-shrublands. The narrow riparian zone is dominated by a blue spruce / thinleaf alder riparian community. Other tall shrubs found along the corridor include Drummond's willow (*Salix drummondiana*) and Bebb's willow (*Salix bebbiana*). Cover of herbaceous species is sparse with bluejoint (*Calamagrostis canadensis*), horsetail (*Equisetum arvense*), and common cowparsnip (*Heracleum maximum*) being most common. Exotic species are not common along the drainage, but occur along the road corridor and grazed uplands.

### Key Environmental Factors

Key environmental factors influencing species composition of the wetland are montane elevation, gentle to moderate slope, groundwater recharge, and seasonal flooding.

### Climate Description

Climate and weather tend to follow typical patterns of the San Juan mountains of Colorado being generally xeric throughout the year with warm spring weather causing snowmelt flooding, wet summers, and a late summer "monsoon" season.

### Land Use History

No Data

### Cultural Features

No Data

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## SITE DESIGN

Site Map Y - Yes Mapped Date 10/15/2006

Designer Jones, J.R.

### Boundary Justification

The site encompasses approximately 3 miles along the middle reaches of Cebolla Creek. Boundaries include 1,000 ft of uplands to buffer from impacts to site condition (Keate 2004). This buffer accounts for natural ecological processes important for the maintenance of wetland elements such as seasonal flooding, groundwater recharge, surface flows, and sediment deposition. The boundary does not include all ecological processes necessary to the maintenance of the site and upstream activities such as deforestation, improper livestock grazing or recreational use, development, road maintenance or water diversion could be detrimental to the site. The lower reaches of Cebolla drainage are excluded due to distance, differences in hydrologic regime, ecological functions, and disturbances.

Primary Area 748.85 Acres 303.05 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) blue spruce / thinleaf alder woodland (*Picea pungens* / *Alnus incana* woodland).

Other Values Rank V2 - High values

### Other Values Comments

This site provides several ecological values to the area in terms of aesthetics and ecosystem health including game and wildlife habitat, flood attenuation and storage, erosion control, and aquifer recharge.

## LAND MANAGEMENT ISSUES

### Land Use Comments

Predominant land uses include livestock grazing and recreation.

### Natural Hazard Comments

Natural hazards include spring flooding.

### Exotics Comments

Exotic species are not common along this section of Cebolla Creek, but are common along reaches above and below this section due to accessibility of riparian areas.

### Offsite

Off-site considerations include livestock grazing, road and road maintenance, watershed diversions, upstream dams, and recreational uses.

### Information Needs

An occurrence of the globally rare Black Canyon gilia (*Gilia penstemonoides*) was documented in 1981. Further field surveys are needed to relocate this occurrence.

## ASSOCIATED ELEMENTS OF BIODIVERSITY

<u>Element</u>	<u>State Scientific Name</u>	<u>State Common Name</u>	<u>Global Rank</u>	<u>State Rank</u>	<u>Driving Site Rank</u>
24518	<i>Picea pungens</i> / <i>Alnus incana</i> Woodland	Montane Riparian Forests	G3	S3	Yes

## REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
192813	Keate, Nancy S. 2004. Bibliography of Impacts to Wetlands II - Draft - revised - Jan 2004. Utah Wetland Outreach, Wildlife Resources, Utah Department of Natural Resources.
194565	Neid, S.L. and J.R. Jones. 2008. Final Report: Survey of Critical Wetlands and Riparian Areas in Hinsdale County. Colorado Natural Heritage Program, Fort Collins, CO.
194566	Steven, T.A. 1974. Geologic Map of the Durango Quadrangle, Southwestern Colorado. United States Geological Survey, Department of Interior, Reston, VA.
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.

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## ADDITIONAL TOPICS

### Additional Topics

Original site design by Grunau, T.L. 1996-08-08.

## VERSION

Version Date 10/15/2006

Version Author Jones, J.R.

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