

Level 4 Potential Conservation Area (PCA) Report

Name Bear Creek below Simmons Peak

Site Code S.USCOHP*25891

IDENTIFIERS

Site ID 2289 Site Class PCA
 Site Alias None

Network of Conservation Areas (NCA)

NCA Site ID	NCA Site Code	NCA Site Name
-		No Data

LOCATORS

Nation United States Latitude 382648N
 State Colorado Longitude 1055830W

Quad Code	Quad Name
38106-D1	Poncha Pass
38105-D8	Wellsville

County

Fremont (CO)
 Saguache (CO)

Watershed Code	Watershed Name
13010003	San Luis
11020001	Arkansas Headwaters

SITE DESCRIPTION

Minimum Elevation	7,700.00 Feet	2,346.96 Meters
Maximum Elevation	12,050.00 Feet	3,672.84 Meters

Site Description

Bear Creek is a moderate to high-gradient, perennial stream that plunges down the north-facing slopes of the Sangre de Cristo Range on the west side of Fremont County. The Sangre de Cristo Mountains are a linear range of steep, rugged peaks that rise out of the valleys below. Bear Creek's riparian system spans several elevation zones before its confluence with the Arkansas River. The mainstem begins in the talus slopes just above treeline below the craggy ridgeline and flows through subalpine spruce-fir forest before it grades into aspen and mixed evergreen forest where several tributary streams join the main channel. At lower elevations, the south-facing upland slopes have pinon pine (*Pinus edulis*) and Gambel oak (*Quercus gambelii*) while the north-facing slopes have mixed ponderosa pine - Douglas-fir (*Pinus ponderosa* - *Pseudotsuga menziesii*) forest. The tree canopy of the riparian system mirrors the upland forest canopy at higher elevations. At treeline, the stream flows through a small bowl. This lower gradient section has subalpine fir - Engelmann spruce / tall fringed bluebells (*Abies lasiocarpa* - *Picea engelmannii* / *Mertensia ciliata*) forest with spongy, mossy streambanks common at high elevations. Below the bowl, the stream corridor predominantly has a moderate to high gradient although past beaver activity has punctuated the reach with short stretches that have low gradient and small vegetated benches. Aspen (*Populus tremuloides*) is common in the tree canopy at higher elevations with quaking aspen / tall forbs (*Populus tremuloides* / tall forbs) forest the most abundant riparian natural community. At middle elevations the tree canopy becomes more mixed. Narrowleaf cottonwood (*Populus angustifolia*) and balsam poplar (*Populus balsamifera*) as well as Douglas-fir and white fir (*Abies concolor*) begin to enter the canopy. At lower elevations (approximately 8,000 feet), narrowleaf cottonwood is currently the sole canopy dominant in the riparian corridor (although the subcanopy has many conifers). On steeper reaches, there is greater shrub diversity and abundance whereas herbaceous ground cover dominates in lower gradient areas. The most frequent shrub along the reach is thinleaf alder (*Alnus incana*), although river birch (*Betula occidentalis*) is common and dominant in places. The herbaceous layer is not well-developed due to the dense shade of the shrub and canopy. However, in canopy gaps and on seepy benches, diverse forbs are present. This reach may be transitioning to a conifer-dominated riparian forest; throughout the lower and middle elevations conifer species form a subcanopy or are common in the shrub layer. Many aspen and narrowleaf cottonwood trees have been felled by beaver or are over mature or standing dead snags.

Key Environmental Factors

Moderate to high stream gradient; beaver activity; montane, subalpine, and alpine elevation zones.

Climate Description

No Data

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Land Use History

No Data

Cultural Features

No Data

SITE DESIGN

Site Map Y - Yes

Mapped Date 01/13/2006

Designer Neid, S.L.

Boundary Justification

Boundary drawn as a 1 km buffer of the riparian corridor clipped at the upper end by the watershed boundary formed by the sharp, jagged ridgeline of the Sangre de Cristo Range. The lower end of the site was drawn at the upper boundary of hay meadows and where land parcels along the drainage are divided into small lots.

Primary Area 3,322.97 Acres

1,344.76 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B3: High Biodiversity Significance

Biodiversity Significance Comments

This site encompasses an excellent to good (AB-ranked) occurrence of a globally vulnerable (G3/S3) riparian natural community, quaking aspen / thinleaf alder (*Populus tremuloides* / *Alnus incana*) woodland and a good (B-ranked) occurrence of a globally vulnerable (G3/S3) riparian natural community, narrowleaf cottonwood / thinleaf alder (*Populus angustifolia* / *Alnus incana*) woodland.

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

No Data

Offsite

No Data

Information Needs

No Data

ASSOCIATED ELEMENTS OF BIODIVERSITY

<u>Element</u>			<u>Global Rank</u>	<u>State Rank</u>	<u>Driving Site Rank</u>
<u>State ID</u>	<u>State Scientific Name</u>	<u>State Common Name</u>			
24911	<i>Populus tremuloides</i> / <i>Alnus incana</i> Forest	Montane Riparian Forests	G3	S3	Yes
24541	<i>Populus angustifolia</i> / <i>Alnus incana</i> Woodland	Montane Riparian Forest	G3	S3	Yes

REFERENCES

Reference ID

Full Citation

193618

Neid, S.L. 2006. Final Report: Survey of Critical Wetlands and Riparian Areas in Fremont County, Colorado. Colorado Natural Heritage Program, Fort Collins, CO.

ADDITIONAL TOPICS

Additional Topics

No Data

VERSION

Version Date 01/13/2006

Version Author Neid, S.L.

Disclaimer

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