

# Level 4 Potential Conservation Area (PCA) Report

Name Bear Creek

Site Code S.USCOHP\*5069

## IDENTIFIERS

Site ID 29 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 375456N  
State Colorado Longitude 1074825W

### Quad Code Quad Name

37107-H7 Telluride

### County

San Miguel (CO)

### Watershed Code Watershed Name

14030003 San Miguel

## SITE DESCRIPTION

<b>Minimum Elevation</b>	8,880.00	<b>Feet</b>	2,707.00	<b>Meters</b>
<b>Maximum Elevation</b>	11,600.00	<b>Feet</b>	3,536.00	<b>Meters</b>

### Site Description

A popular hiking and bicycle trail begins in the town of Telluride, at the foot of Pine Street, and continues up the Bear Creek drainage for about 2 miles to Bear Creek Falls. Formerly a road, it is now closed to motorized vehicles. Geologic formations are, from lower to higher elevations, Cutler and Dolores sandstones, Eocene pre-volcanic sedimentary rocks, and Tertiary volcanics. Forested areas on the north-facing hillsides are in excellent condition, and include several plant communities that are representative of the San Miguel Basin's montane zone. At the lower part of the proposed conservation area, a mix of aspen, spruce and white fir dominate the canopy. The understory has a very rich assemblage of shrubs, grasses and forbs. Some of the most common species are red-osier dogwood, Rocky Mountain maple, twinberry honeysuckle, meadowrue, and russet buffaloberry. Other than a few pasture grasses and introduced forbs (e.g. Kentucky bluegrass, orchard grass, meadow timothy, red clover, shepherd's purse) along the trail, all the plants are native to the area. Farther upstream, subalpine fir and Engelmann spruce become the dominant species in the canopy, and the understory is very deeply shaded and moist. Farther yet, open areas have wet meadows or willow carrs. A high quality community of Geyer willow in an avalanche run was documented as part of the riparian classification project conducted by CNHP in 1993 (Kittel and Lederer 1993). Black Swifts were observed at the Bear Creek Falls, and they may be nesting behind the cascades of the falls. Bear Creek Falls offers several features necessary for Black Swift breeding habitat: permanent water flow, a commanding view of the valley, open flight paths to access falls, cascades of approximately 65 feet, many niches for nesting, and extensive moss cover behind cascades within which the swifts excavate a nest. Flowing falls are a necessity for Colorado's nesting Black Swifts. Regulation of practices that divert stream flows, to prevent complete loss of water flow at nesting falls and subsequent abandonment of breeding sites, would be beneficial to the swifts. Small populations of two rare ferns, slender rock-brake and smooth cliff-brake, were found at the falls in 1999, both occurring under dripping ledges wet with spray from the waterfall. As Black Swift habitat, Bear Creek Falls offers permanent water flow, a commanding view of the valley, open flight paths to access falls, cascades of approximately 65 feet, and many niches for nesting and extensive moss cover behind cascades.

### Key Environmental Factors

No Data

### Climate Description

No Data

### Land Use History

No Data

### Cultural Features

No Data

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## SITE DESIGN

Site Map Y - Yes Mapped Date 03/13/2000

Designer Lyon, M.J. and J.R. Sovell

### Boundary Justification

The boundary was drawn to include Bear Creek, with its riparian area and examples of surrounding forest, from the trailhead to Bear Creek Falls. The site encompasses the areas of aspen forest and tall willow community that were surveyed and found to be in good to excellent condition. This does not imply that areas outside the boundary that were not surveyed are not equally significant. Bear Creek Falls is the nesting site of Black Swifts. The entire area needed by this species for foraging would extend much farther, and was not included in the boundary. Likewise, the entire watershed upstream of the boundary can potentially affect the hydrology of this site. Flowing falls are a necessity for Colorado's nesting swifts. Diversion of stream flows reducing water flow at the falls could result in abandonment of breeding sites. This could also cause the loss of the two ferns that were found growing in cliffs that are wet with spray from the falls.

Primary Area 687.16 Acres 278.08 Hectares

## SITE SIGNIFICANCE

Biodiversity Significance Rank B4: Moderate Biodiversity Significance

### Biodiversity Significance Comments

Bear Creek contains an excellent (A-ranked) occurrence of a state rare (G4/S2S3) aspen forest community, *Populus tremuloides* / *Cornus sericea*, and a good to fair (BC-ranked) occurrence of a globally rare (G3/S3) tall willow community, *Salix geyeriana* - *Salix monticola* / mesic forb. In addition, two species of ferns, the slender rock-brake and the smooth rock-brake, considered to be rare in Colorado, were found here. Black Swifts, considered vulnerable in Colorado, were also documented.

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

Hydrological processes originating outside the planning boundary, including water quality, quantity, and timing, must be managed to maintain site viability.

### Information Needs

No Data

## ASSOCIATED ELEMENTS OF BIODIVERSITY

Element State ID	State Scientific Name	State Common Name	Global Rank	State Rank	Driving Site Rank
22152	<i>Cryptogramma stelleri</i>	slender rock-brake	G5	S2	No
24480	<i>Abies lasiocarpa</i> / <i>Mertensia ciliata</i> Forest	Montane Riparian Forests	G5	S5	No
24591	<i>Populus tremuloides</i> / <i>Cornus sericea</i> Forest	Montane Riparian Woodland	G4	S2S3	Yes
22152	<i>Cryptogramma stelleri</i>	slender rock-brake	G5	S2	No
23518	<i>Cypseloides niger</i>	Black Swift	G4	S3B	No
21939	<i>Pellaea suksdorfiana</i>	smooth cliff-brake	G5T4?	S2	No
24573	<i>Salix geyeriana</i> - <i>Salix monticola</i> / Mesic Forbs Shrubland	Geyer's Willow-Rocky Mountain Willow/Mesic Forb	G3	S3	Yes

## REFERENCES

Reference ID Full Citation  
- No Data

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## ADDITIONAL TOPICS

### Additional Topics

No Data

## VERSION

Version Date 03/13/2000

Version Author Lyon, M.J. and J.R. Sovell

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