

# Level 4 Potential Conservation Area (PCA) Report

Name Catamount Creek

Site Code S.USCOHP\*28245

## IDENTIFIERS

Site ID 2746 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 385558N  
State Colorado Longitude 1050217W

Quad Code Quad Name  
38105-H1 Woodland Park

County  
Teller (CO)

Watershed Code Watershed Name  
11020003 Fountain

## SITE DESCRIPTION

Minimum Elevation	8,000.00 Feet	2,438.40 Meters
Maximum Elevation	9,400.00 Feet	2,865.12 Meters

### Site Description

This site is located in the montane zone on the east slope of the Front Range west of the Town of Green Mountain Falls and east of North Catamount Reservoir. The Catamount Creek site encompasses steep, forested hillslopes and a low gradient, east-trending valley that abruptly transitions to a steep, rock-walled canyon drained by Catamount Creek. Stream type varies dramatically with the landscape. At the top of the site, where the stream flows through a low gradient valley, the channel is a meandering, Rosgen type C channel. At the head of the canyon the stream plunges down a steep cataract to the valley floor. Here the channel is a Rosgen type Aa+ bedrock controlled channel with waterfalls, cascades and plunge pools. Where the stream reaches the valley floor, the channel type transitions again to a moderate-gradient, bedrock/boulder controlled Rosgen type B3c stream with a step-pool structure. Riparian habitat at the top of the site, in the low-gradient valley, is characterized by a wide willow carr with a patchy and open tree canopy. Tree species here include quaking aspen (*Populus tremuloides*), Engelmann spruce (*Picea engelmannii*) and Douglas-fir (*Pseudotsuga menziesii*). Willow species include mountain willow (*Salix monticola*), and strappleaf willow (*Salix ligulifolia*). Where the gradient steepens, Douglas-fir / river birch (*Pseudotsuga menziesii* / *Betula occidentalis*) woodlands characterize riparian vegetation in the narrow, rock-walled canyon. On the valley floor, historic riparian habitat was characterized by blue spruce/river birch (*Picea pungens*/*Betula occidentalis*) forest but which has been converted to residential habitat. Uplands are dominated by Douglas-fir forests on north facing slopes and by ponderosa pine / Arizona fescue (*Pinus ponderosa* / *Festuca arizonica*) woodlands on south facing slopes. Geology is composed of Precambrian age granitic rocks of the Pikes Peak batholith of the 1,000 m.y. age group (Tweto 1979). Soils are aquolls that are well drained gravels derived from the extremely friable Pikes Peak granite (USDA NRCS 2008).

### Key Environmental Factors

The key environmental factor determining biota in this site are ecologic processes, especially hydrology (Rondeau 2001) and specifically constant and sufficient stream flows, out of bank flows and shallow ground and surface water flow.

### Climate Description

Due to elevation and complex topography climate in the Pikes Peak area is dramatically different from climate at relatively nearby locations at lower elevations. Due to geography, precipitation in Front Range ecosystems in Teller County comes primarily during summer months. At this site on the east-facing slope of the Front Range at an elevation of 8,583 feet, from 1971 to 2000, coldest temperatures occurred in January with an average maximum of 37.42 °F and a minimum of 12.9 °F. Warmest temperatures occurred in July with an average maximum of 74.44 °F and an average minimum of 48.31 °F. Annual average maximum precipitation was 23.20 inches. July and August were the wettest months of the year with 3.66 and 3.96 inches of precipitation respectively. Driest months are December, January and February with 0.74, 0.50, and 0.68 inches of precipitation respectively. March through June and September through November have intermediate

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amounts of precipitation (Prism 2010).

## Land Use History

No Data

## Cultural Features

No Data

## SITE DESIGN

Site Map Y - Yes

Mapped Date 12/28/2010

Designer Malone, D.G.

## Boundary Justification

The boundary was drawn along adjacent ridgelines, which includes the watershed boundary to the north and south, for immediate watershed protection and to capture hydrologic processes essential to the long-term maintenance of the element. Private lands were surveyed only with written permission.

Primary Area 282.84 Acres

114.46 Hectares

## SITE SIGNIFICANCE

Biodiversity Significance Rank B4: Moderate Biodiversity Significance

## Biodiversity Significance Comments

This site is drawn for a fair (C-ranked) occurrence of the globally vulnerable (G3?/S3) riparian woodland Douglas-fir / river birch (*Pseudotsuga menziesii* / *Betula occidentalis*). This association is limited to perennial streams where the cold-air drainage and perennial stream flow provide a cool and moist environment to support a diverse shrub canopy (Carsey et al. 2003). This woodland association is documented from the eastern slope of the Colorado Rockies with less than 20 occurrences expected. One site has been documented in Utah and it may occur in Nevada (NatureServe 2010).

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</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>
24962	<i>Pseudotsuga menziesii</i> / <i>Betula occidentalis</i> Woodland	Montane Riparian Forest	G3?	S3	Yes

## REFERENCES

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## Reference ID

## Full Citation

159854	Carsey, K., G. Kittel, K. Decker, D. Cooper, and D. Culver. 2003. Field guide to the wetland and riparian plant associations of Colorado. Prepared for the Colorado Department of Natural Resources, Denver, CO by the Colorado Natural Heritage Program, Fort Collins, CO.
198660	Culver, D.R., D. Malone, and A. Shaw. 2011. CNHP Final Report: Survey of Critical Biological Resources in Teller County, Colorado. Colorado Natural Heritage Program, Fort Collins, CO.
198314	NatureServe Explorer (Web Page). Accessed 2010. An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. <a href="http://www.natureserve.org/explorer">http://www.natureserve.org/explorer</a> .
198649	Prism Climate Group (Web Page). Accessed 2010. Spatial Climate Analysis. <a href="http://www.prism.oregonstate.edu/">http://www.prism.oregonstate.edu/</a>
190863	Rondeau, R. 2001. Ecological system viability specifications for Southern Rocky Mountain ecoregion. First Edition. Colorado Natural Heritage Program, Colorado State University, Fort Collins, CO. 181 pp.
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.

## ADDITIONAL TOPICS

### Additional Topics

No Data

## VERSION

Version Date 12/28/2010

Version Author Malone, D.G.

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