

# Level 4 Potential Conservation Area (PCA) Report

Name Chittenden Mountain

Site Code S.USCOHP\*27374

## IDENTIFIERS

Site ID 2515 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 395729N  
State Colorado Longitude 1053716W

### Quad Code Quad Name

39105-H5 Nederland  
39105-H6 East Portal

### County

Boulder (CO)

### Watershed Code Watershed Name

10190005 St. Vrain

## SITE DESCRIPTION

Minimum Elevation	9,563.65 Feet	2,915.00 Meters
Maximum Elevation	10,311.68 Feet	3,143.00 Meters

### Site Description

This site is in the lower subalpine elevation zone at the Wilderness Area boundary above Hessie. Vegetation in the area is a mosaic of aspen (*Populus tremuloides*) groves and patches of spruce - fir (*Picea engelmannii* - *Abies lasiocarpa*) forest on the east-west trending ridges and slopes with grassland meadows in the valleys. North-facing slopes are predominantly spruce - fir with areas of cliff and talus and south-facing slopes have mixed spruce - fir - aspen forests. The vegetation transitions to alpine tundra within 0.5-1 mile from the site. Aspen occurs in smaller stands on the Front Range rather than as a wide-ranging matrix system. Aspen stands tend to have very high herbaceous diversity, like this stand, which means they contain a disproportionately high percentage of the biodiversity of forests for their size on the Front Range. This site has excellent regeneration beneath a dense canopy of aspen, although there are several spruce trees that emerge well above the aspen. The stand transitions to a subalpine grassland in the meadow at the toeslope of the ridge. The grassland has abundant Parry's oatgrass (*Danthonia parryii*) and Thurber's fescue (*Festuca thurberi*), two species that indicate good habitat quality. Additional grasses include poverty oatgrass (*Danthonia intermedia*), junegrass (*Koeleria macrantha*), and sedges (*Carex* species). Forb diversity is very high. The meadow is dotted with small clusters of young spruce, aspen, and limber pine (*Pinus flexilis*), especially around rock outcrops. Swales in the meadow tend to have shrubby cinquefoil (*Dasiphora fruticosa*) and baltic rush (*Juncus balticus*). There is significant pocket gopher activity in both the meadow and adjacent aspen forest and minor amounts of Canada bluegrass (*Poa compressa*), likely introduced from the pack trail that runs through the meadow. The riparian corridor of the South Fork of Middle Boulder Creek is a moderately-wide valley with several anastomosing channels. The riparian vegetation is a mosaic of spruce - fir forest and diamond-leaf willow (*Salix planifolia*) shrublands with lush herbs along the stream channels.

### Key Environmental Factors

Subalpine elevation zone; metamorphic bedrock.

### Climate Description

No Data

### Land Use History

No Data

### Cultural Features

No Data

## SITE DESIGN

Site Map P - Partial Mapped Date 10/20/2008  
Designer Neid, S.L.

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## Boundary Justification

The boundary contains a landscape mosaic of spruce - fir forest, aspen stands, and grassland meadows that contain element occurrences and adjacent suitable habitat.

Primary Area 238.76 Acres 96.62 Hectares

## SITE SIGNIFICANCE

**Biodiversity Significance Rank** B3: High Biodiversity Significance

## Biodiversity Significance Comments

This site is drawn for an excellent (A-ranked) occurrence of a globally vulnerable (G3/S3) Thurber's fescue (*Festuca thurberi*) subalpine grassland herbaceous vegetation and a good (B-ranked) occurrence of the globally apparently secure (G4/S4) aspen / Thurber's fescue (*Populus tremuloides* / *Festuca thurberi*) forest. There is a common (G5/S4) *Salix planifolia* / *Carex aquatilis* subalpine riparian willow carr in excellent condition, but this community is not the focus of the site.

**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

Some Canada bluegrass (*Poa compressa*) has established along the trail.

## 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>
24997	<i>Festuca thurberi</i> Subalpine Grassland Herbaceous Vegetation		G3	S3	Yes
24582	<i>Populus tremuloides</i> / <i>Festuca thurberi</i> Forest	Aspen Forests	G4	S4	No

## REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
195190	Neid, S., J. Lemly, K. Decker and D. Culver. 2009. Final Report: Survey of Critical Biological Resources in Boulder County 2007-2008. Colorado Natural Heritage Program, Fort Collins, CO.

## ADDITIONAL TOPICS

## Additional Topics

No Data

## VERSION

**Version Date** 10/20/2008

**Version Author** Neid, S.L.

## Disclaimer

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