

# Level 4 Potential Conservation Area (PCA) Report

Name Copeland Willow Carr

Site Code S.USCOHP\*585

## IDENTIFIERS

Site ID 1807 Site Class PCA  
Site Alias Copeland Lake

### 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 401249N  
State Colorado Longitude 1053235W

Quad Code Quad Name

40105-B5 Allens Park

### County

Watershed Code Watershed Name

10190005 St. Vrain

## SITE DESCRIPTION

Minimum Elevation	8,320.00 Feet	2,535.94 Meters
Maximum Elevation	9,160.00 Feet	2,791.97 Meters

### Site Description

The Copeland willow carr is located on North St. Vrain Creek, about 1.5 miles northwest of Allenspark. North St. Vrain Creek drains most of the northwestern corner of Boulder County, from Ogalalla Peak on the Continental Divide to the southern flank of Longs Peak. Numerous steep, snow-fed tributaries join along the upper reaches of the creek as it passes through Rocky Mountain National Park's Wild Basin. Once the creek reaches the Copeland willow carr, the valley widens and the stream gradient is reduced to <1% slope. The valley is broad and long, and is bordered by lateral glacial moraines that rise above the willow carr. The creek itself is 50-66 ft (15-20 m) wide through the valley and contains many meanders, back channels, and oxbows. In addition, there are numerous deep beaver ponds, mostly on the north side of the creek. Riparian vegetation extends far beyond the creek banks and fills the valley bottom. The site encompasses the flat-bottomed valley bounded by Copeland Moraine just above Hwy 72. The Copeland willow carr is the most extensive willow carr in Boulder County, stretching along approximately 1.3 miles (2,000 m) of North St. Vrain Creek, and covering well over 100 acres. At its widest, the willow carr is approximately 1,148 ft (350 m) wide, and contains dense, tall willows (2-5 m tall) interspersed with shorter willows, open sedge and grass inclusions, and open water beaver ponds. The most dominant tall shrub species are park willow (*Salix monticola*) and Geyer willow (*Salix geyeriana*), each providing 20-30% cover. The area also contains high cover of water birch (*Betula occidentalis*), which is frequent along North St. Vrain Creek from the Copeland willow carr downstream to Lyons. The understory is primarily dominated by bluejoint reedgrass (*Calamagrostis canadensis*), but contains localized patches of beaked sedge (*Carex utriculata*), water sedge (*Carex aquatilis*), and fowl mannagrass (*Glyceria striata*) depending on local hydrology. Surrounding slopes are dominated by mixed conifer and aspen. Geology in the valley underlying the willow carr is mapped as glacial drift of Pinedale and Bull Lake glaciations.

### Key Environmental Factors

The entire valley is wet throughout the summer, likely due to beaver activity that redirects and captures both surface and groundwater flows.

### Climate Description

No Data

### Land Use History

Now the site of the Wild Basin entrance to Rocky Mountain National Park. The area is used for recreation.

### Cultural Features

No Data

## SITE DESIGN

Site Map Y - Yes Mapped Date 06/12/2008  
Designer Decker, K.L. and J.M. Lemly

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## Boundary Justification

The boundary includes the willow carr and adjacent habitats of the immediate watershed. Note that upstream origins of ecological processes, outside of the site boundaries, must be managed to protect the hydrological integrity of the area.

Primary Area 766.22 Acres 310.08 Hectares

## SITE SIGNIFICANCE

Biodiversity Significance Rank B3: High Biodiversity Significance

## Biodiversity Significance Comments

The site supports an excellent to good (AB-ranked) occurrence of a globally vulnerable (G3/S3) *Salix geyeriana* - *Salix monticola* / *Calamagrostis canadensis* montane willow carr and an excellent (A-ranked) occurrence of the state rare (G5/S2) broad-leaved twayblade (*Listera convallarioides*). This site is the location for the highest bird densities of any mountain site in the County (Hallock et al. 1986).

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

Non-native plants present in low cover include redbud (*Agrostis gigantea*) and timothy (*Phleum pratense*).

## 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>
24489	<i>Salix geyeriana</i> - <i>Salix monticola</i> / <i>Calamagrostis canadensis</i> Shrubland	Montane Willow Carrs	G3	S3	Yes
17861	<i>Listera convallarioides</i>	broad-leaved twayblade	G5	S2	No

## REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
190716	Hallock, D., N. Lederer, and M. Figgs. 1986. Ecology, status and avifauna of willow carrs in Boulder County. Boulder County Nature Association Publication No. 4. Boulder, CO. 38 pp.
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

Original site design by Pague, C.A. 1994-09-12.

## VERSION

Version Date 06/12/2008  
Version Author Decker, K.L. and J.M. Lemly

## Disclaimer

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