

Level 4 Potential Conservation Area (PCA) Report

Name Luder Creek

Site Code S.USCOHP*10848

IDENTIFIERS

Site ID 1120 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 380914N
State Colorado Longitude 1063329W

Quad Code Quad Name
38106-B5 North Pass

County

Saguache (CO)

Watershed Code Watershed Name
13010004 Saguache

SITE DESCRIPTION

Minimum Elevation	8,800.00 Feet	2,682.00 Meters
Maximum Elevation	10,150.00 Feet	3,094.00 Meters

Site Description

This site includes an extensive montane riparian shrubland on Luder Creek floodplain in the upper montane life zone approximately 2 air miles east of the Continental Divide. The site includes over 1500 acres of floodplain and toeslope habitats extending for 5 miles along Luder Creek from 8,800 to 10,150 feet (2,684-3096 meters) in elevation. The community is rich in plant species and willow age classes. Dominant willows include Geyer's willow (*Salix geyeriana*), mountain willow (*Salix monticola*), and planeleaf willow (*Salix planifolia*). The riparian soils are perennially wet and support an understory of wetland species, including beaked sedge (*Carex utriculata*), water sedge (*Carex aquatilis*), tufted hairgrass (*Deschampsia cespitosa*), and Canadian reedgrass (*Calamagrostis canadensis*). Drier margins of the floodplain support stands of shrubby cinquefoil (*Pentaphylloides floribunda*) with Thurber's fescue (*Festuca thurberi*) and occasional patches of the non-native Kentucky bluegrass (*Poa pratensis*). Adjoining upland vegetation is spruce-fir (*Picea engelmannii*-*Abies lasiocarpa*) and aspen (*Populus tremuloides*) forest on northern aspects and bristlecone pine/fescue (*Pinus aristata*/*Festuca* spp.) woodlands on southern exposures. This site is heavily used as a car camping area, particularly at Luder Creek campground, with fishing and hunting in season. Livestock graze the site seasonally and tend to congregate in the floodplain wetlands along Luder Creek. Cochetopa Pass Road borders the site on the north and bisects it just east of the entrance to Luder Creek campground.

Key Environmental Factors

No Data

Climate Description

No Data

Land Use History

No Data

Cultural Features

No Data

SITE DESIGN

Site Map P - Partial Mapped Date 02/15/1998
Designer Sarr, D.A.

Boundary Justification

This boundary is drawn to 1) protect the riparian occurrences from direct impacts such as trampling, overuse, or other surface disturbances; and 2) to include the immediate slopes which contribute surface and groundwater flow to the wetlands. The site boundary was based on initial aerial photo analysis, a 1997 field visit by a CNHP wetland ecologist, and subsequent corroboration with satellite imagery.

Primary Area 1,538.34 Acres 622.55 Hectares

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SITE SIGNIFICANCE

Biodiversity Significance Rank B5: General Biodiversity Interest

Biodiversity Significance Comments

This site contains a good occurrence of a montane riparian shrubland and one of the largest occurrences of beaked sedge-tufted hairgrass wet meadow known for Saguache County. This site contains a good occurrence of mountain willow/mesic graminoid (*Salix monticola*/mesic graminoid) montane riparian shrubland, a CNHP community of special concern, and an excellent example of a beaked sedge montane wetland. In addition, the site harbors aspen forests and shrubby cinquefoil shrublands on terraces adjacent to the riparian zone, enhancing the habitat of the floodplain. As a whole, the site contains a structurally and floristically diverse assemblage of riparian and moist toeslope plant communities. The Geyer willow-mountain willow/mesic forb plant association and similar types occur in eastern Utah, Idaho (Padgett et al. 1989), Wyoming, and Colorado (Johnston 1987, Baker 1989, Bourgeron and Engelking 1994, Colorado Natural Heritage Program 1997). This community type is geographically widespread but occurs only in areas with suitable environmental conditions of medium to fine textured alluvial soils, perennial soil moisture, and abundant light. The low gradient meadows where this community occurs are favored as summer pasture for domestic livestock. Livestock herbivory of seedlings can lead to losses of stands by attrition, and many known stands in Colorado are severely impacted by livestock grazing (Kittel 1997, personal communication). This association is threatened by livestock grazing and invasive species throughout its range. The beaked sedge wetland at this site is in excellent condition and quite large for this region, extending several miles along the valley of Luder Creek. The beaked sedge wetland type is relatively common at middle and upper elevation through the ranges of the Western U.S., occurring in riparian, lakeside, and fen wetlands. Large fen wetlands, which are formed by stable discharge of groundwater, are one of Colorado's rarer wetland types. They require wet, anaerobic soils, carbon accumulation from vigorous plant growth, low soil temperatures, and long periods of time to form their characteristic peat soils. Once formed, these peat soils are essentially irreplaceable in any management time frame.

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>			
24585	<i>Salix monticola</i> / Mesic Graminoids Shrubland	Montane Riparian Willow Carr	G3	S3	Yes

REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
-	No Data

ADDITIONAL TOPICS

Additional Topics

No Data

VERSION

Version Date 02/15/1998
Version Author Sarr, D.A.

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