

Level 4 Potential Conservation Area (PCA) Report

Name Upper Mosca Creek

Site Code S.USCOHP*8453

IDENTIFIERS

Site ID 936 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 372446N
State Colorado Longitude 1072310W

<u>Quad Code</u>	<u>Quad Name</u>
37107-D4	Granite Peak
37107-D3	Bear Mountain

County

Archuleta (CO)
Hinsdale (CO)

<u>Watershed Code</u>	<u>Watershed Name</u>
14080102	Piedra

SITE DESCRIPTION

Minimum Elevation	7,860.00 Feet	2,396.00 Meters
Maximum Elevation	9,400.00 Feet	2,865.00 Meters

Site Description

The site is comprised of the riparian area along Upper Mosca Creek. Forested uplands have spruce (*Picea engelmannii*) and fir (*Abies lasiocarpa*), while the upper watershed has been logged. There are many open meadows along the drainage.

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 06/09/1997
Designer Kettler, S.M.

Boundary Justification

The boundary encompasses the occurrence and an approximate 1,000 foot buffer. Eliminating disturbance within this 1,000 foot buffer would aid in reducing impacts from sedimentation (Karr and Schlosser 1978), and assist in maintaining the integrity of the occurrence and its associated avian, macroinvertebrate and periphyton communities (Noel et al. 1986, Spackman and Hughes 1995).

Primary Area	783.28 Acres	316.98 Hectares
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SITE SIGNIFICANCE

Biodiversity Significance Rank B4: Moderate Biodiversity Significance

Biodiversity Significance Comments

The Upper Mosca Creek site contains an excellent (A-ranked) occurrence of an subalpine fir (*Abies lasiocarpa*) / mixed currant coniferous wetland forest. This plant community is globally common (G5) but vulnerable (S3) in the state. In Colorado, the wetland forest is a facultative riparian forest with a wide elevation range, 8,200 to 12,000 feet. Stands occur along very steep streams where the riparian area is narrow and dominated by species of the surrounding forest. These forests are heavily shaded with a very open shrub layer of just a few individuals. Subalpine fir dominates the dense tree canopy, while any of the

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following currant species may be present in the shrub layer: gooseberry (*Ribes inerme*), prickly currant (*Ribes lacustre*) and alpine prickly currant (*Ribes montigenum*).

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 of the site boundaries, including water quality, quantity, timing and flow must be managed to maintain the current quality of the coniferous wetland forest.

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>
24897	<i>Abies lasiocarpa</i> / <i>Ribes</i> (<i>montigenum</i> , <i>lacustre</i> , <i>inerme</i>) Forest	Coniferous Wetland Forests	G5	S3	Yes

REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
172808	J. R. Karr and I. J. Schlosser. 1978. Water resources and the land-water interface. Science 201: 229-234.
166839	Lyon, P. 2001. Colorado Natural Heritage Program Field Surveys.
194565	Neid, S.L. and J.R. Jones. 2008. Final Report: Survey of Critical Wetlands and Riparian Areas in Hinsdale County. Colorado Natural Heritage Program, Fort Collins, CO.
165959	Noel, D.S., C.W. Martin and C.A. Federer. 1986. Effects of Forest Clearcutting in New England on Stream Macroinvertebrates and Periphyton. Environmental Management 10: 661-670.
165197	Richard, C. and D. Grant. 1995. Colorado Natural Heritage Program Riparian Field Survey for San Juan National Forest.
193472	Sovell, J., P. Lyon, and L. Grunau. 2003. Final Report: Upper San Juan Biological Assessment. Colorado Natural Heritage Program, Fort Collins, CO.
159511	Spackman, S. C. and J. W. Hughes. 1995. Assessment of Minimum Stream Corridor Width for Biological Conservation: Species Richness and Distribution Along Mid-Order Streams in Vermont, USA. Biological Conservation 71:325-332.

ADDITIONAL TOPICS

Additional Topics

No Data

VERSION

Version Date 02/15/2002

Version Author Lyon, M.J.

Disclaimer

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