

Level 4 Potential Conservation Area (PCA) Report

Name Indian Creek at Williams Creek Reservoir

Site Code S.USCOHP*8459

IDENTIFIERS

Site ID 1758 Site Class PCA
Site Alias Indian Creek

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 373348N
State Colorado Longitude 1071001W

Quad Code Quad Name
37107-E2 Cimarrona Peak

County
Hinsdale (CO)

Watershed Code Watershed Name
14080102 Piedra

SITE DESCRIPTION

Minimum Elevation	9,200.00 Feet	2,804.00 Meters
Maximum Elevation	10,000.00 Feet	3,048.00 Meters

Site Description

The Indian Creek at Williams Creek Reservoir site encompasses a riparian area along Indian Creek at 9,500 feet in the San Juan Mountains of Hinsdale County. The narrow valley runs north - south and drains Palisade Meadow into Williams Creek. The area is characterized by a steep canyon with slopes of over 50% and there are numerous slides forming pockets of open riparian areas along Indian Creek that are dominated by willow (*Salix* sp.). Drummond's willow (*Salix drummondiana*) / mesic forb riparian shrublands dominate these willow areas. Willows, including Rocky Mountain willow (*Salix monticola*), cover 100% of these areas and forbs, including woodreed (*Cinna latifolia*), cow parsnip (*Heracleum lanatum*), waterleaf (*Hydrophyllum capitatum*) and Franciscan bluebells (*Mertensia franciscana*), cover 70% of the ground. In more forested areas outside of the slides, thinleaf alder (*Alnus incana*) dominates. The upland areas of the hillside contain a mix of spruce (*Picea* sp.), fir (*Abies* sp.) and aspen (*Populus tremuloides*). Although the site is quite pristine, a trail runs directly through it and there are a few exotic plant species present that were probably introduced through activities on the trail.

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 04/11/1997

Designer Fayette, K.K.

Boundary Justification

The boundary includes the occurrence and a small buffer up and downstream, and uphill of the creek. This buffer is intended to prevent impacts from trampling and to provide suitable habitat where additional individuals can become established over time. Eliminating disturbance within this 1,000-foot buffer would also 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). It should be noted that the hydrological processes necessary to the willow - forb community are not fully contained by the site boundaries. Given that the community is dependent on natural hydrological processes associated with Indian Creek, upstream activities such as water diversions,

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impoundments, and improper livestock grazing are detrimental to the hydrology of the riparian area. This boundary indicates the minimum area that should be considered for any conservation management plan.

Primary Area 64.38 Acres

26.06 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B4: Moderate Biodiversity Significance

Biodiversity Significance Comments

This site contains an excellent (A-ranked) occurrence of Drummond's willow (*Salix drummondiana*) / mesic forb, a plant community that is apparently secure on a global scale (G4/S4). This riparian shrubland occurs in the Wyoming Basin and the Southern Rocky Mountain ecoregions and is most commonly found on relatively steep streams, rarely forming more than a narrow, 5 to 25 feet wide band along streambanks. The closed to partially open canopy of Drummond's willow and a thick carpet of many forb species characterize this plant association.

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

Element			Global	State	Driving
State ID	State Scientific Name	State Common Name	Rank	Rank	Site Rank
24961	<i>Salix drummondiana</i> / Mesic Forbs Shrubland	Drummonds Willow/Mesic Forb	G4	S4	Yes

REFERENCES

Reference ID	Full Citation
172808	J. R. Karr and I. J. Schlosser. 1978. Water resources and the land-water interface. Science 201: 229-234.
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.
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 04/11/1997

Version Author Fayette, K.K.

Disclaimer

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