

# Level 4 Potential Conservation Area (PCA) Report

Name Dolores River at Snow Spur

Site Code S.USCOHP\*1632

## IDENTIFIERS

Site ID 725 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 374720N  
State Colorado Longitude 1075635W

Quad Code Quad Name  
37107-G8 Mount Wilson

## County

Dolores (CO)  
San Miguel (CO)

<u>Watershed Code</u>	<u>Watershed Name</u>
14030002	Upper Dolores
14030003	San Miguel

## SITE DESCRIPTION

<b>Minimum Elevation</b>	9,300.00	<b>Feet</b>	2,835.00	<b>Meters</b>
<b>Maximum Elevation</b>	10,600.00	<b>Feet</b>	3,231.00	<b>Meters</b>

## Site Description

Dolores River at Snow Spur is a large site encompassing a variety of wetland plant associations from subalpine to montane settings. Snowspur Creek at Lizardhead Pass is surrounded by high peaks of the San Miguel Mountains, Yellow Mountains, and Sheep Mountain ranges. Near the pass, along Snow Spur Creek, water sedge (*Carex aquatilis*) dominates a large wet meadow where the small, headwater creek supports narrow to wide, thickets of low-growing wolf willow (*Salix wolfii*). Highway 145 runs adjacent much of the site, providing a pass between the towns of Rico and Telluride. Because of the beauty and accessibility, the wet meadow is surrounded with roads, campsites and horse camps. The soggy soils in the meadow provide intrinsic protection from severe direct impacts. Soils in the meadow have a shallow organic horizon and oxidized root channels and mottles below this horizon, indicating periods of both saturation and drying. Downstream, Snow Spur Creek joins the Dolores River, where willow carrs dominate the riparian vegetation in mosaic with coniferous dominated stands. Mountain willow/mesic forb (*Salix monticola*) is the dominant riparian willow shrubland on the Dolores River. Steeper, more narrow tributaries support willow carrs such as the shortfruit willow (*Salix brachycarpa*)/mesic forb and the Geyer willow (*Salix geyeriana*)/mesic forb plant associations. Soils in these areas are alluvial. The area has a history of mining and an historic railroad grade can still be discerned. Weeds sparsely occupy the old railroad grade, as well as throughout the rest of the site. The mountain willow wetland, located near the Barlow Creek and Dolores River confluence, is the most severely impacted due to the proximity to the highway and several legal and illegal public land accesses. Soils in the site are derived from alluvium and vary according with geomorphic position. In the water sedge (*Carex aquatilis*) dominated wet meadow, along Snow Spur Creek, the soil has an organic soil horizon (6 cm mucky peat), and oxidized root channels and mottles below this horizon, indicating periods of both saturation and drying. Within the wolf willow carr, soils are alluvial (cobble and gravels) with a very shallow mineral horizon (silty clay loam). Mapped soil units along Snow Spur Creek are: a complex of Typic Cryaquent, Cryaquoll, Cryofibrists; and Hourglass - Wander complex: Hourglass is fine-loamy, mixed, superactive Typic Argicryoll; and Wander is loamy-skeletal, mixed, superactive Typic Argicryoll; finally, Frisco loam is mapped on the adjacent slopes. (USDA, NRCS 2002).

## Key Environmental Factors

No Data

## Climate Description

No Data

## Land Use History

No Data

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## Cultural Features

No Data

## SITE DESIGN

Site Map Y - Yes

Mapped Date 11/16/2004

Designer March, M.A.

## Boundary Justification

The boundaries incorporate an area that encompasses the element occurrences, and immediate upstream watershed that buffer hydrological processes such as seasonal flooding, necessary for the viability of the element occurrences. Natural fluvial processes such as seasonal flooding, sediment deposition and beaver activity will help maintain succession and viable populations of the elements along Dolores River (Sanderson and Kettler 1996.). The boundary also delineates a buffer that surrounds the highway, campsites and trails where direct disturbance may cause excessive erosion, sedimentation and weed invasion. It should be noted that all hydrological processes necessary for the viability of the elements are not contained within the site boundary.

Primary Area 2,534.55 Acres

1,025.70 Hectares

## SITE SIGNIFICANCE

Biodiversity Significance Rank B3: High Biodiversity Significance

## Biodiversity Significance Comments

The site supports a good (B-ranked) occurrence of the globally vulnerable (G3S3) *Salix geyeriana*/mesic forb montane riparian willow carr; a fair (C-ranked) occurrence of the globally vulnerable (G3S3) *Salix drummondiana*-*Calamagrostis canadensis* willow carr; a good (B-ranked) occurrence of the apparently globally secure (G4) vulnerable in the state (S3) *Salix monticola*/mesic forbs willow carr; a good (B-ranked) occurrence of the apparently globally secure (G4) vulnerable in the state (S3) *Salix wolfii*/*Carex aquatilis* willow carr; a good to fair (BC-ranked) occurrence of the apparently globally secure (G4S4) *Salix brachycarpa*/mesic forb shrubland; and a good (B-ranked) occurrence of the demonstrably globally secure (G5) apparently secure in the state (S4) *Carex aquatilis* wet meadow.

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 planning boundary, including water quality, quantity, timing and flow must be managed to maintain site viability.

## Information Needs

No Data

## ASSOCIATED ELEMENTS OF BIODIVERSITY

<u>Element State ID</u>	<u>State Scientific Name</u>	<u>State Common Name</u>	<u>Global Rank</u>	<u>State Rank</u>	<u>Driving Site Rank</u>
22745	<i>Carex aquatilis</i> Herbaceous Vegetation	Montane Wet Meadows	G5	S4	No
24809	<i>Salix monticola</i> / Mesic Forbs Shrubland	Montane Riparian Willow Carr	G4	S3	No
24806	<i>Salix brachycarpa</i> / Mesic Forbs Shrubland	Alpine Willow Scrub	G4	S4	No
24629	<i>Salix geyeriana</i> / Mesic Forbs Shrubland	Montane Willow Carr	G3	S3	Yes
24473	<i>Salix drummondiana</i> / <i>Calamagrostis canadensis</i> Shrubland	Lower Montane Willow Carrs	G3	S3	No
24666	<i>Salix wolfii</i> / <i>Carex aquatilis</i> Shrubland	Subalpine Riparian Willow Carr	G4	S3	No

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## REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
169844	Kittel, G., N. Lederer, M. Condron, and S. Hamer. 1991. Riparian field survey of San Miguel and Dolores River Basins.
192742	March, M.A. 2005. Final Report: Natural Heritage Wetland Inventory of Dolores County. Colorado Natural Heritage Program, Fort Collins, CO.
158563	Sanderson, J. and S. Kettler. 1996. A preliminary wetland vegetation classification for a portion of Colorado's West Slope. Unpublished final report submitted to the Colorado Department of Natural Resources and the U.S. Environmental Protection Agency. Colorado Natural Heritage Program, Fort Collins.
192746	United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). 2002. Animas-Dolores Area, Colorado, Parts of Archuleta, Dolores, Hinsdale, La Plata, Montezuma, San Juan, and San Miguel Counties. Soil Survey Area Version 1, established 11/9/2004 for digital formats. Retrieved from Soil Data Mart: <a href="http://www.nrcs.usda.gov">www.nrcs.usda.gov</a> < <a href="http://www.nrcs.usda.gov">http://www.nrcs.usda.gov</a> >.

## ADDITIONAL TOPICS

### Additional Topics

No Data

## VERSION

**Version Date** 11/16/2004  
**Version Author** March, M.A.

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