

# Level 4 Potential Conservation Area (PCA) Report

Name Fish Creek at Black Mesa

Site Code S.USCOHP\*9423

## IDENTIFIERS

Site ID 1388 Site Class PCA  
Site Alias Fish Creek State Wildlife Area

## 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 374516N  
State Colorado Longitude 1081344W

## Quad Code Quad Name

37108-G2 Groundhog Mountain  
37108-F2 Clyde Lake

## County

Dolores (CO)

## Watershed Code Watershed Name

14030002 Upper Dolores

## SITE DESCRIPTION

Minimum Elevation	8,700.00 Feet	2,652.00 Meters
Maximum Elevation	9,240.00 Feet	2,816.00 Meters

## Site Description

The Fish Creek at Black Mesa Site surrounds the middle reach of Fish Creek. It is a montane stream surrounded by grass and sedge meadows and multiple beaver enhanced wetlands. Adjacent areas are steep mountain slopes dominated by spruce-fir forests or rock talus slides. The riparian area is a mosaic with dense willow carrs, water and bare soil from breached beaver ponds. Along the steeper gradients of Fish Creek, mixed riparian shrubs and coniferous riparian forests form a mosaic. Scattered blue spruce (*Picea pungens*) are located in the riparian zone within willow-dominated wetlands. Mountain willow (*Salix monticola*) dominates the shrub layer with associated shrubs including Drummond's willow (*Salix drummondiana*), thinleaf alder (*Alnus incana*), gooseberry (*Ribes* spp.), twinberry (*Lonicera involucrata*), serviceberry (*Amelanchier alnifolia*), and Wood's rose (*Rosa woodsii*). Graminoids are more common than forbs in the herbaceous understory (20 - 30%) and adjacent meadows. Beaked sedge (*Carex utriculata*) dominates the herbaceous understory with associated species including but not limited to wooly sedge (*Carex lanuginosa*), common horsetail (*Equisetum arvense*), bluejoint reedgrass (*Calamagrostis canadensis*), mannagrass (*Glyceria striata*), Merten's rush (*Juncus mertensianus*), rush species (*Juncus* spp.), and Kentucky bluegrass and timothy (*Poa pratensis* and *Phleum pratense*) hay grasses. Forbs are very diverse, but found in trace canopy cover within the herbaceous understory. In the upper reaches of the site, thinleaf alder (*Alnus incana*) co-dominates the shrub canopy with Drummond's willow (*Salix drummondiana*). Coniferous forests dominate along the steeper gradients of Fish Creek. The dynamic riparian habitat structure provides excellent wildlife habitat, evidenced by several signs noted in 2004 including deer, elk, raccoon, beaver, coyote, a variety of small mammals, songbirds and birds of prey. Fish were observed in ponds as well as aquatic insects in ripples including may fly, stone fly and caddis fly larvae. Geology in the upper (north) part of the site is comprised of the Morrison, Wanakah, and Entrada formations; the lower part (SWA) is comprised of the Dolores Formation - red siltstone, conglomerate. Soils are derived from alluvium and vary according with the geomorphic position. Soils sampled are sandy loam with little organic matter over alluvium. The dominant mapped soil unit in the site wetlands is Typic Cryaquent and Cryaquoll complex (USDA, NRCS 2003).

## Key Environmental Factors

No Data

## Climate Description

No Data

## Land Use History

No Data

## Cultural Features

No Data

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## SITE DESIGN

Site Map Y - Yes

Mapped Date 11/19/2004

Designer March, M.A.

### Boundary Justification

The boundary encompasses all of the element occurrences and immediate areas, buffering ecological and hydrological processes, (e.g., flooding), necessary for the viability of the elements. The boundary also provides a buffer from the adjacent trail, campsites and road in the lower portion, where surface runoff may contribute excess nutrients, sediment and weed invasion. Natural fluvial processes such as seasonal flooding and sediment deposition, as well as beaver activity, will help maintain viable populations of the elements along Fish Creek (Sanderson and Kettler 1996). It should be noted that all hydrological processes necessary for wetland viability are not contained within the site boundaries.

Primary Area 707.81 Acres 286.44 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 (G3/S3) riparian shrubland, *Alnus incana*-*Salix drummondiana*; and a fair (C-ranked) occurrence of the globally vulnerable (G3/S3) riparian willow carr, *Salix monticola*/mesic graminoids.

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

Monitoring of exotic species may be needed.

### 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>
24585	<i>Salix monticola</i> / Mesic Graminoids Shrubland	Montane Riparian Willow Carr	G3	S3	No
24743	<i>Alnus incana</i> - <i>Salix drummondiana</i> Shrubland	Montane Riparian Shrubland	G3	S3	Yes

## REFERENCES

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## Reference ID

## Full Citation

159567	Carsey, K. and M. Aitken. 1993. Colorado Natural Heritage Program San Juan National Forest Riparian Site Survey.
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

Site originally designed by Kettler, S.M., 1997-06-09.

## VERSION

Version Date 11/19/2004

Version Author March, M.A.

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