

# Level 4 Potential Conservation Area (PCA) Report

Name Dolores River at Peterson Slide

Site Code S.USCOHP\*25293

## IDENTIFIERS

Site ID 2178 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 374327N  
State Colorado Longitude 1080141W

### Quad Code Quad Name

37108-F1 Rico

### County

Dolores (CO)

### Watershed Code Watershed Name

14030002 Upper Dolores

## SITE DESCRIPTION

Minimum Elevation	-	Feet	-	Meters
Maximum Elevation	-	Feet	-	Meters

### Site Description

The Dolores River descends from the high elevations of Lizardhead Pass in the San Juan Mountains, in a southward direction through alpine to montane ecosystems. The Dolores River at Peterson Slide flows through a moderately wide valley with steep sparsely vegetated uplands. The stream channel is slightly sinuous to straight due to the confines of the topography, gradient, and geology. Surface geology in the site is composed of landslide deposits, which are locally either quaternary glacial rock (talus etc.) or colluvial material (Tweto 1979). This is evidenced by the roughness of the land surface and composition of the piles (cobbles, boulders, gravels -- alluvium). The landslide located adjacent to the river affects the channel by creating braids and active point bars dominated by early successional riparian shrublands. Recent beaver dams trap sediment, where shrubs and trees are regenerating on the immediate floodplain and point bars with saplings of narrowleaf cottonwood and willows. It is curious that there are several immature Colorado blue spruce (*Picea pungens*) situated on the floodplain, since this tree is not typically a pioneering species. The dominant plant association in this area is thinleaf alder-Drummond's willow (*Alnus incana* -*Salix drummondiana*). There are fringes of mesic graminoids along the banks such as beaked sedge (*Carex utriculata*), water sedge (*Carex aquatilis*), swordleaf rush (*Juncus ensifolius*), Tracy's rush (*Juncus tracyi*), and common horsetail (*Equisetum arvense*). The secondary floodplain has an open to closed canopy of mountain willow (*Salix monticola*), Drummond's willow (*S. drummondiana*) and thinleaf alder (*Alnus incana*) with a mixed understory of mesic graminoids, mesic forbs, upland forbs, exotics and hay grasses. The site contains a cottonwood gallery in the willow mosaic dominated by the narrowleaf cottonwood/thinleaf alder (*Populus angustifolia*/*Alnus incana*) plant association. There is a wide age class represented here, with sapling, pole, mature and decadent cottonwoods. Other associated shrubs are Drummond's willow and mountain willow with shrubby cinquefoil (*Dasiphora fruticosa*) on terraces. While uplands have been heavily disturbed in the past from mining activity, ecologists first visited the cottonwood gallery in 1993, and the health and vigor of the natural plant community appears to be sustaining. Soils are derived from alluvium and vary according with geomorphic position. Beaver dams trap sediments that are composed of mineral horizons with little organic matter, otherwise soils are very shallow, mineral soils and alluvium. Mapped soil units within the riparian area in the site are: Rubbleland; and Cryaquolls and Typic Cryaquent. (USDA, NRCS 2002).

### Key Environmental Factors

No Data

### Climate Description

No Data

### Land Use History

No Data

# Level 4 Potential Conservation Area (PCA) Report

Name Dolores River at Peterson Slide

Site Code S.USCOHP\*25293

## Cultural Features

No Data

## SITE DESIGN

Site Map Y - Yes

Mapped Date 11/16/2004

Designer March, M.A.

## Boundary Justification

The boundary encompasses the element occurrences as well as a projected buffer to identify the ecological and hydrological processes that are required to sustain the elements. Natural fluvial activity such as flooding events and sediment deposition contribute to the perpetuity of riparian systems, such as the cottonwood system (Hansen et al. 1995; TNC 1996). The boundaries also provide a small buffer from nearby social trails, the highway and unofficial roads/campsites where surface runoff may contribute excess nutrients, sediment and weed invasion. It should be noted that the hydrological processes necessary to the element are not fully contained by the site boundaries.

Primary Area 296.04 Acres 119.81 Hectares

## SITE SIGNIFICANCE

Biodiversity Significance Rank B4: Moderate Biodiversity Significance

## Biodiversity Significance Comments

The site supports the globally vulnerable (G3S3) *Populus angustifolia*/*Alnus incana* natural plant community in fair (C-ranked) condition; and the globally vulnerable (G3S3) *Alnus incana*-*Salix drummondiana* shrubland in fair (C-ranked) condition.

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

Exotics include common dandelion (*Taraxacum officinale*), smooth brome (*Bromus inermis*) and others in low canopy cover.

## Offsite

Settling ponds downstream for mine adits, ponds upstream of Rico.

## Information Needs

No Data

## ASSOCIATED ELEMENTS OF BIODIVERSITY

<u>Element</u>	<u>State Scientific Name</u>	<u>State Common Name</u>	<u>Global Rank</u>	<u>State Rank</u>	<u>Driving Site Rank</u>
24541	<i>Populus angustifolia</i> / <i>Alnus incana</i> Woodland	Montane Riparian Forest	G3	S3	Yes
24743	<i>Alnus incana</i> - <i>Salix drummondiana</i> Shrubland	Montane Riparian Shrubland	G3	S3	Yes

## REFERENCES

# Level 4 Potential Conservation Area (PCA) Report

Name Dolores River at Peterson Slide

Site Code S.USCOHP\*25293

## Reference ID

## Full Citation

167028	Hansen, P. L., R. D. Pfister, K. Boggs, B. J. Cook, J. Joy, and D. K. Hinckley. 1995. Classification and management of Montana's riparian and wetland sites. Montana Forest and Conservation Experiment Station Miscellaneous Publication No. 54. The University of Montana, Missoula, MT.
192742	March, M.A. 2005. Final Report: Natural Heritage Wetland Inventory of Dolores County. Colorado Natural Heritage Program, Fort Collins, CO.
171753	The Nature Conservancy of Colorado. 1996. Yampa River Site Conservation Plan. The Nature Conservancy, Boulder, CO.
192747	Tweto, O. 1979. Geologic Map of Colorado, 1:500,000. United States Geological Survey, Department of Interior, and Geologic Survey of Colorado, Denver, CO.
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.

## Disclaimer

These data are a product and property of Colorado State University, Colorado Natural Heritage Program (CNHP). These data are strictly "on loan" and should be considered "works in progress". Data maintained in the Colorado Natural Heritage Program database are an integral part of ongoing research at CSU and reflect the observations of many scientists, institutions and our current state of knowledge. These data are acquired from various sources, with varying levels of accuracy, and are continually being updated and revised. Many areas have never been surveyed and the absence of data in any particular geographic area does not necessarily mean that species or ecological communities of concern are not present. These data should not be regarded as a substitute for on-site surveys required for environmental assessments. Absence of evidence is NOT evidence of absence. Absence of any data does not mean that other resources of special concern do not occur, but rather CNHP files do not currently contain information to document this presence. CNHP is not responsible for whether other, non-CNHP data providers have secured landowner permission for data collected.

**These data are provided for non-commercial purposes only.** Under no circumstances are data to be distributed in any fashion to outside parties. To ensure accurate application of data, tabular and narrative components must be evaluated in conjunction with spatial components. Failure to do so constitutes a misuse of the data. The Colorado Natural Heritage Program shall have no liability or responsibility to the data users, or any other person or entity with respect to liability, loss, or damage caused or alleged to be caused directly or indirectly by the data, including but not limited to any interruption of service, loss of business, anticipatory profits or indirect, special, or consequential damages resulting from the use of operation of the data. Data users hereby agree to hold CNHP, Colorado State University, and the State of Colorado harmless from any claim, demand, cause of action, loss, damage or expense from or related to data users use of or reliance on the data, regardless of the cause or nature thereof, and even in the event that such cause is attributable to the negligence or misconduct of CNHP.

These data are provided on an as-is basis, as-available basis without warranties of any kind, expressed or implied, INCLUDING (BUT NOT LIMITED TO) WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT. Although CNHP maintains high standards of data quality control, CNHP, Colorado State University, and the State of Colorado further expressly disclaim any warranty that the data are error-free or current as of the date supplied