

# Level 4 Potential Conservation Area (PCA) Report

Name Middle Fork Piedra River

Site Code S.USCOHP\*26717

## IDENTIFIERS

Site ID 2412 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 372817N  
State Colorado Longitude 1071016W

Quad Code Quad Name  
37107-D2 Oakbrush Ridge

County  
Hinsdale (CO)

Watershed Code Watershed Name  
14080102 Piedra

## SITE DESCRIPTION

Minimum Elevation	7,800.00 Feet	2,377.44 Meters
Maximum Elevation	8,400.00 Feet	2,560.32 Meters

### Site Description

The montane riparian forest occurrence is situated along approximately 4.5 km of the lower reaches of the Middle Fork of the Piedra River. The Middle Fork is a second order tributary of the Piedra River that flows through a wide valley, with glacial alluvium and drifts along upper reaches narrowing along lower reaches. The floodplain is variable throughout, with large backwater sloughs and narrow, sinuous sections. Banks are stable and vegetated throughout, with large boulders and cobbles along the streambed. The riparian community occurs consistently along the length of the river corridor for approximately 4.5 km. Blue spruce (*Picea pungens*) forms a consistent canopy throughout the occurrence. Other canopy species present include quaking aspen (*Populus tremuloides*) and ponderosa pine (*Pinus ponderosa*), both with low cover. A subcanopy is composed of a tall shrub layer and sapling blue spruce. The tall shrub layer is diverse with thinleaf alder (*Alnus incana*), park willow (*Salix monticola*), narrowleaf willow (*Salix exigua*), Drummond's willow (*Salix drummondiana*), and strapleaf willow (*Salix ligulifolia*) all being consistent. Sandbars support sapling blue spruce and dense willow communities. Short shrubs occurring along the banks of the river include twinberry honeysuckle (*Lonicera involucrata*) and Wood's rose (*Rosa woodsii*). Herbaceous vegetation is sparse, but the most common species include common cowparsnip (*Heracleum maximum*), Northwest Territory sedge (*Carex utriculata*), cutleaf coneflower (*Rudbeckia laciniata* var. *ampla*), and bluejoint (*Calamagrostis canadensis*). There are multiple backwater sloughs dominated by herbaceous graminoids. Adjacent uplands are dominated by xeric ponderosa pine woodlands. Quaking aspen forms a consistent component in the canopy and subcanopy layer with Gambel's oak (*Quercus gambelii*) and roundleaf snowberry (*Symphoricarpos rotundifolius*) dominating the shrub layer. Exotic species are not common along riparian areas but are present in adjacent uplands. Common dandelion (*Taraxacum officinale*), white clover (*Trifolium repens*), red clover (*Trifolium pratense*), cheatgrass (*Bromus tectorum*), and Kentucky bluegrass (*Poa pratensis*) are common. Disturbances in the area include livestock grazing, an adjacent road, camping and recreational uses, and upstream water diversion. Toner Taylor Ditch water diversion runs adjacent to the river for about 1.5 miles. Livestock use this, instead of the river, as a water source.

### Key Environmental Factors

Key environmental factors influencing species composition of the wetland are montane elevation, perennial surface flows, low gradient, and seasonal flooding.

### Climate Description

Climate and weather tend to follow typical patterns of the San Juan Mountains of Colorado being generally xeric throughout the year with warm spring weather causing snowmelt flooding, wet summers, and a late summer "monsoon" season.

### Land Use History

No Data

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## Cultural Features

No Data

## SITE DESIGN

Site Map Y - Yes

Mapped Date 10/15/2006

Designer Jones, J.R.

## Boundary Justification

Boundaries include 1,000 ft of uplands to buffer from impacts to site condition (Keate 2004). This buffer accounts for natural ecological processes important for the maintenance of wetland elements such as seasonal flooding, groundwater recharge, surface flows, and sediment deposition. However, the boundary does not include all hydrological processes necessary to the maintenance of site hydrology and upstream activities such as deforestation, improper livestock grazing, development, or water diversion could be detrimental to the site. Sections of an adjacent road and ditch, which may impact site hydrology and wetland functions, are also included. This may help to identify and manage for possible impacts from these disturbances.

Primary Area

826.70 Acres

334.56 Hectares

## SITE SIGNIFICANCE

Biodiversity Significance Rank B3: High Biodiversity Significance

## Biodiversity Significance Comments

This site is drawn for a good (B-ranked) occurrence of the globally vulnerable (G3/S3) blue spruce / thinleaf alder riparian wetland (*Picea pungens* / *Alnus incana* woodland). This site also contains a good (B-ranked) occurrence of a state rare (G4/S3) park willow (*Salix monticola*) / mesic forbs shrubland.

Other Values Rank V2 - High values

## Other Values Comments

This site provides high ecological values to the area in terms of aesthetics and its functions in ecosystem health including game and wildlife habitat.

## LAND MANAGEMENT ISSUES

## Land Use Comments

Predominant land uses include livestock grazing and recreation. Water diversion along the upper reaches of the drainage may impact the site.

## Natural Hazard Comments

Spring flooding is the most evident natural hazard.

## Exotics Comments

Exotic species are common in surrounding uplands due to roads, livestock grazing, and water diversion disturbances. Common dandelion (*Taraxacum officinale*), white clover (*Trifolium repens*), red clover (*Trifolium pratense*), cheatgrass (*Bromus tectorum*), and Kentucky bluegrass (*Poa pratensis*) are common. These species are not common along riparian reaches, but there is a possibility for invasion.

## Offsite

Off-site considerations include livestock impacts and recreational uses.

## 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>
24518	<i>Picea pungens</i> / <i>Alnus incana</i> Woodland	Montane Riparian Forests	G3	S3	Yes
24809	<i>Salix monticola</i> / Mesic Forbs Shrubland	Montane Riparian Willow Carr	G4	S3	No

## REFERENCES

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## Reference ID

## Full Citation

192813

Keate, Nancy S. 2004. Bibliography of Impacts to Wetlands II - Draft - revised - Jan 2004. Utah Wetland Outreach, Wildlife Resources, Utah Department of Natural Resources.

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.

## ADDITIONAL TOPICS

### Additional Topics

No Data

## VERSION

Version Date 10/15/2006

Version Author Jones, J.R.

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