

Level 4 Potential Conservation Area (PCA) Report

Name Hunter Campground

Site Code S.USCOHP*1609

IDENTIFIERS

Site ID 519 Site Class PCA
 Site Alias Davis 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 372203N
 State Colorado Longitude 1071742W

<u>Quad Code</u>	<u>Quad Name</u>
37107-C3	Devil Mountain
37107-D3	Bear Mountain

County

Archuleta (CO)

<u>Watershed Code</u>	<u>Watershed Name</u>
14080102	Piedra

SITE DESCRIPTION

Minimum Elevation	7,020.00 Feet	2,139.70 Meters
Maximum Elevation	7,920.00 Feet	2,414.02 Meters

Site Description

The Hunter Campground site is situated in the north-central part of Archuleta County along a relatively straight reach of the Piedra River, just below Second Box Canyon in a narrow, deep, shaded valley with side slopes dropping over 500 feet from steep ridges. The riparian forest along the Piedra River within the site consists of blue spruce (*Picea pungens*) and Douglas-fir (*Pseudotsuga menziesii*) with scattered narrowleaf cottonwood (*Populus angustifolia*). The understory cover of shrubs is clearly dominated by thinleaf alder (*Alnus incana*), but also includes narrowleaf willow (*Salix exigua*), Woods' rose (*Rosa woodsii*), red-osier dogwood (*Cornus sericea*) and chokecherry (*Prunus virginiana*). The dominant community along the river is blue spruce / thinleaf alder montane riparian forest. Common forbs and graminoids in the understory include indianhemp (*Apocynum sibiricum*), smooth horsetail (*Equisetum laevigatum*), and field horsetail (*Equisetum arvense*). The riverbed contains large boulders as well as transported alluvium, which forms islands and cobble bars that are scoured annually by seasonal flooding and are typically dominated by coyote willow with a high percentage of unvegetated surface. Some areas along the Piedra River and within the site have no riparian vegetation due to the sheer rock walls with no bank or floodplain. Near the south boundary is Piedra Hunter Campground, a semi-primitive and very popular camping area. First Fork Trailhead is located at the Campground, where a large bridge crosses the river. This bridge has been closed to motorized vehicles and bicycles since the congressional designation of the Piedra Area in 1993 (US Public Law 103-77 1993), which prohibits motorized and mechanized travel within the 62,500 acre Piedra Area. From the trailhead, the Piedra River Trail runs both upstream and downstream along the Piedra River, and as a result, the area experiences heavy recreational use from hikers and horse riders. The Piedra River Trail passes through the Hunter Campground site and crosses several tributaries feeding the Piedra River, including Davis Creek, a relatively short, four-mile long creek that starts in mountain meadows and drops some 2,000 feet in those four miles. Large boulders are strewn along the banks of the ephemeral spring stream, which is usually dry by mid-summer. Blue spruce and Douglas-fir are the dominant trees in the overstory along Davis Creek, and there is a dense cover of shrubs including thinleaf alder, Rocky Mountain maple (*Acer glabrum*) and red-osier dogwood in the understory. The Douglas-fir / Rocky Mountain maple lower montane forest community is dominant on this portion of Davis Creek. Ground cover includes a thin cover of grasses such as fowl bluegrass (*Poa palustris*) and fringed brome (*Bromus ciliatus*), and a higher-percent cover of forbs, such as cutleaf coneflower (*Rudbeckia laciniata* var. *ampla*), Porter's licorice-root (*Ligusticum porteri*) and Franciscan bluebells (*Mertensia franciscana*).

Key Environmental Factors

This reach of the Piedra River and its tributary streams at their confluence with the river are within the Rico/Hermosa Formation, which is comprised of arkosic sandstone, conglomerate, shale and limestone (Tweto 1979). Soils within the riparian zone are alluvial, including large cobble and boulders with gravelly or sandy deposits. The soils on terraces vary, but are typically more developed.

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Climate Description

No Data

Land Use History

No Data

Cultural Features

No Data

SITE DESIGN

Site Map Y - Yes

Mapped Date 11/14/2005

Designer Freeman, K.M. and M.A. March

Boundary Justification

The boundary encompasses the occurrences and an approximate 1,000 foot buffer. Eliminating disturbances within this 1,000 foot buffer would aid in reducing impacts from sedimentation (Karr and Schlosser 1978), and assist in maintaining the integrity of the occurrences and its associated avian, macroinvertebrate and periphyton communities (Noel et al. 1986, Spackman and Hughes 1995). The boundaries also incorporate an area that will allow natural hydrologic processes such as seasonal flooding, sediment deposition, and new channel formation to maintain viable populations of the plant community along Davis Creek and the Piedra River. It should be noted that the natural hydrological processes necessary to maintain and support the montane riparian forest occurrences are not fully contained by the site boundaries. Given that the communities are dependent on natural hydrologic processes associated with Davis Creek and the Piedra River, upstream activities such as water diversions, impoundments, and improper livestock grazing are detrimental to maintaining the supporting hydrology of the riparian areas. This boundary indicates the minimum area that should be considered for any conservation management plan.

Primary Area 1,746.83 Acres

706.92 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B3: High Biodiversity Significance

Biodiversity Significance Comments

The site supports an occurrence of the globally vulnerable (G3/S3) blue spruce / thinleaf alder (*Picea pungens* / *Alnus incana*) montane riparian forest plant association in good (B-ranked) condition. The blue spruce / thinleaf alder riparian plant association is somewhat widespread on the western slope of Colorado, and may also occur in Wyoming and New Mexico. In Colorado, it has been found in the Routt National Forest, south to the Rio Grande and San Juan National Forests. This association occurs along narrow to moderately wide floodplains and stream benches in narrow canyons subject to cold air drainage and limited sunlight, typically in small patches and scattered locations. Recent inventory efforts by the Colorado Natural Heritage Program have found this association to be more common in Colorado than previously thought. While livestock grazing has negatively impacted many stands, and dams or hydrologic alterations are threats, the association does not appear to be rare or severely threatened. The site also supports a state rare (G4?/S1) Douglas-fir / Rocky Mountain maple (*Pseudotsuga menziesii* / *Acer glabrum*) lower montane forest plant association in good (B-ranked) condition. As of 2005, this community occurrence represents the best-known occurrence in Archuleta County.

Other Values Rank No Data

Other Values Comments

No Data

LAND MANAGEMENT ISSUES

Land Use Comments

No Data

Natural Hazard Comments

Plenty of western poison ivy (*Toxicodendron rydbergii*) occurs along the trails and hillsides all along both sides of the Piedra River.

Exotics Comments

Exotic and invasive flora currently do not pose a large problem; however, the high level of recreational use (including horseback riding and packing) threatens to introduce exotic species at the dispersed camping areas, along the trails system, and at the trailhead at Hunter Campground/First Fork. Encouragement and enforcement of the use of certified weed seed free feed for horse users would benefit the ongoing viability and

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quality of the element occurrences by reducing the risk of introduction of exotic species.

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

Baseline monitoring for the presence of exotic or invasive species would benefit the long-term viability of the element occurrences by providing a gauge with which to determine the progressive spread of exotic species within the site.

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>
24518	<i>Picea pungens</i> / <i>Alnus incana</i> Woodland	Montane Riparian Forests	G3	S3	Yes
24528	<i>Pseudotsuga menziesii</i> / <i>Acer glabrum</i> Forest	Lower Montane Forests	G4?	S1	No

REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
162794	Baker, W. L. 1985. Field Survey to the San Juan Mountains of July 24-August 8, 1985.
160903	Carsey, K., D. Cooper, K. Decker, D. Culver, and G. Kittel. 2003. Statewide wetlands classification and characterization: Wetland plant associations of Colorado. Prepared for Colorado Department of Natural Resources, Denver, CO by Colorado Natural Heritage Program, Fort Collins, CO.
193633	Freeman, K.M., March, M.A. and D.R. Culver. 2006. Final Report: Survey of Critical Wetlands and Riparian Areas in Archuleta County. Colorado Natural Heritage Program, Fort Collins, CO.
172808	J. R. Karr and I. J. Schlosser. 1978. Water resources and the land-water interface. <i>Science</i> 201: 229-234.
165959	Noel, D.S., C.W. Martin and C.A. Federer. 1986. Effects of Forest Clearcutting in New England on Stream Macroinvertebrates and Periphyton. <i>Environmental Management</i> 10: 661-670.
193472	Sovell, J., P. Lyon, and L. Grunau. 2003. Final Report: Upper San Juan Biological Assessment. Colorado Natural Heritage Program, Fort Collins, CO.
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. <i>Biological Conservation</i> 71:325-332.
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.
193584	USDA, Natural Resources Conservation Service. 2003. The PLANTS Database. National Plant Data Center, Baton Rouge, LA. Online at: http://plants.usda.gov .
172684	Weber, W.A. and R.C. Wittmann. 2001. Colorado Flora: Western Slope, Third Edition. University Press of Colorado, Niwot, CO.

ADDITIONAL TOPICS

Additional Topics

Original site design by Kettler, S.M. 1997-05-23.

VERSION

Version Date	11/14/2005
Version Author	Freeman, K.M. and M.A. March

Disclaimer

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