

Level 4 Potential Conservation Area (PCA) Report

Name Lake Creek

Site Code S.USCOHP*26897

IDENTIFIERS

Site ID 2438 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 394117N
State Colorado Longitude 1083705W

Quad Code Quad Name

39108-F6 Brushy Point
39108-F5 Razorback Ridge

County

Rio Blanco (CO)

Watershed Code Watershed Name

14050007 Lower White

SITE DESCRIPTION

Minimum Elevation	7,000.00 Feet	2,133.60 Meters
Maximum Elevation	8,950.00 Feet	2,727.96 Meters

Site Description

The Lake Creek site is located in the western portion of the Piceance Creek Basin (Basin). Lake Creek drains the first basin to the east of the prominent physiographic feature, Razorback Ridge. This portion typifies the Basin features with depositional valleys at the base of uplifted hills that dip towards the creeks. Lake Creek and its tributaries, Right and Left Forks, are fed by numerous springs and alluvial fan and gulches throughout its length within the site. Lake Creek cuts down through the sedimentary rocks of the Parachute Creek Member forming a steep, entrenched stream with deep pools. The floodplain is formed by both alluvial and colluvial processes. The overstory layer is dominated by Douglas-fir (*Pseudotsuga menziesii*). The shrub layer is diverse with river birch (*Betula occidentalis*), dogwood (*Cornus sericea*), Rocky Mountain maple (*Acer glabrum*), rose (*Rosa woodsii*), golden currant (*Ribes aureum*), snowberry (*Symphoricarpos rotundifolia*), and saplings of Douglas-fir. The forb and herbaceous layer is diverse. Only non-native plants are present at the confluence of the Forks where some grazing is evident.

Key Environmental Factors

The Parachute Creek Member (Green River Formation) dominates this portion of the County. It is comprised of marlstone, sandstone, and oil shale. Lake Creek is located in modern alluvium from the Quaternary Age. Soils are shallow and well drained, derived from sandstone and shale residues. Soils are classified as Irigul channery loam, Irigul-Parachute complex and Razorba channery loam.

Climate Description

In the County, summers are warm or hot in most valleys but are much cooler in the mountains. Winters are cold in the mountains. Summer thunderstorms are prevalent; of the total precipitation, 55% usually falls between April and September. Average seasonal snowfall is 74.4 inches, average day time temperature is 45 degrees and average precipitation is 16.5 inches for Meeker between 1948 -2007 (Western Regional Climate Center 2008).

Land Use History

No Data

Cultural Features

No Data

SITE DESIGN

Site Map Y - Yes Mapped Date 01/10/2008

Designer Culver, D.R.

Boundary Justification

The boundary encompasses the riparian forest plant community, the Colorado River cutthroat trout

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population and potential habitat along the floodplain; however, it only includes the immediate ecological processes. Both private and public lands are included, however, only the public lands were surveyed.

Primary Area 640.06 Acres 259.02 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B3: High Biodiversity Significance

Biodiversity Significance Comments

This site encompasses an excellent (A-ranked) occurrence of a globally vulnerable (G3?/S3) Douglas-fir (*Pseudotsuga menziesii*) / river birch (*Betula occidentalis*) riparian forest. This plant community can be a late seral stage and associated with perennial streams where cold air drainage and perennial stream flow provide a cool and moist environment to support the diverse shrub canopy (Carsey et al. 2003). Additionally, there is an historical occurrence (last observed 1996) of the Colorado River cutthroat trout (G4T3/S3) (*Oncorhynchus clarkii pleuriticus*). Although not designed for these species, the Greater Sage-grouse and other sagebrush obligates such as Columbian Sharp-tailed Grouse (*Tympanuchus phasianellus columbianus*), Sage Sparrow (*Amphispiza belli*), and the Brewer's Sparrow (*Spizella breweri*) depend on large, continuous blocks of viable habitat such as identified within and adjacent to this site.

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

Non-native plants present include Canada thistle (*Breeda arvensis*), houndstongue (*Cynoglossum officinale*), and mullein (*Verbascum thapsus*) especially at the northern section where the Forks confluence.

Offsite

No Data

Information Needs

No Data

ASSOCIATED ELEMENTS OF BIODIVERSITY

<u>Element</u>			<u>Global Rank</u>	<u>State Rank</u>	<u>Driving Site Rank</u>
<u>State ID</u>	<u>State Scientific Name</u>	<u>State Common Name</u>			
24962	<i>Pseudotsuga menziesii</i> / <i>Betula occidentalis</i> Woodland	Montane Riparian Forest	G3?	S3	Yes
21796	<i>Oncorhynchus clarkii pleuriticus</i>	Colorado River Cutthroat Trout	G4T3	S3	No

REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
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.
195026	Culver, D., J. Huggins and P. Lyon. 2008. Final Report: Significant Biological Resources in Rio Blanco County, CO. Colorado Natural Heritage Program, Fort Collins, CO.
195034	WRCC. 2008. Western Regional Climate Center. Division of Atmospheric Sciences, Desert Research Institute. Reno, Nevada. < http://www.wrcc.dri.edu >.

ADDITIONAL TOPICS

Additional Topics

No Data

VERSION

Version Date 01/10/2008

Version Author Culver, D.R.

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