

Level 4 Potential Conservation Area (PCA) Report

Name Glade Canyon Spring

Site Code S.USCOHP*9431

IDENTIFIERS

Site ID 924 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 374843N
State Colorado Longitude 1084420W

Quad Code Quad Name
37108-G6 The Glade

County
Dolores (CO)

Watershed Code Watershed Name
14030002 Upper Dolores

SITE DESCRIPTION

Minimum Elevation	7,700.00 Feet	2,347.00 Meters
Maximum Elevation	8,020.00 Feet	2,444.00 Meters

Site Description

The Glade Canyon Spring site is located along Glade Creek and Glade Canyon in the San Juan National Forest. Glade Creek, located on a high plateau, is an intermittent stream, with several ephemeral tributaries. It eventually drops into a steep box canyon and drains into the Dolores River. Strap leaf willow (*Salix ligulifolia*) and river hawthorn (*Crataegus rivularis*) dominate the ephemeral creek in a mosaic interspersed with open areas commonly used as rangeland. Grazing impacts are moderate to heavy, yet shrub vigor is high. Downstream of this the Glade Canyon Spring discharges in a steep narrow canyon, comprised of sandstone, shale and conglomerate (Dakota sandstone, Entrada sandstone, and Morrison formation). This area is dominated by a variety of shrubs including red-osier dogwood (*Cornus sericea*), serviceberry (*Amelanchier alnifolia*), strap leaf willow (*Salix ligulifolia*), snowberry (*Symphoricarpos rotundifolius*), gooseberry (*Ribes* sp.), chokecherry (*Prunus virginiana*) Rocky Mountain maple (*Acer glabrum*), and coyote willow (*Salix exigua*). Trees present are in an open canopy throughout the canyon, but are in a closed canopy at the spring. The tree layer is dominated by narrowleaf cottonwood (*Populus angustifolia*), and is associated with Douglas-fir (*Pseudotsuga menziesii*), quaking aspen (*Populus tremuloides*) and ponderosa pine (*Pinus ponderosa*). The herbaceous understory is sparse throughout most of the site, except where the Glade Canyon Spring discharges. Plants in the herbaceous understory include false Solomon's seal (*Maianthemum stellatum*; *M. amplexicaule*), meadow rue (*Thalictrum sparsiflorum*), osha (*Ligusticum porteri*), bedstraw (*Galium septentrionale*), yellow mountain parsley (*Pseudocymopterus montanus*), fireweed (*Chamerion danielsii*), paintbrush (*Castilleja linariifolia*), wild iris (*Iris missouriensis*) and others. Uplands surrounding the site are ponderosa pine (*Pinus ponderosa*) forests with aspen (*Populus tremuloides*), oak (*Quercus gambelii*) woodlands and open rangelands. The general vicinity is widely used for cattle grazing. Condition in the canyon area is good, mainly due to its inaccessibility. However, the site is accessible along the ephemeral creek, and is therefore rated in fair condition due to grazing impacts and subsequent altered hydrology. Recreation including four wheel driving and ATV use is confined to the upland areas. Other recreational uses include horse use, hunting, hiking and camping. Mapped soil units in the site are Fughs Loam, Fughs - Granath complex and Fughs - Sheek complex. Fughs is classified as fine, smectitic, frigid Pachic Argiustoll. Granath is classified as fine-silty, mixed, superactive, frigid Typic Argiustoll. Sheek is classified as loamy, skeletal, mixed, superactive, frigid Typic Haplustalf (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 Glade Canyon Spring

Site Code S.USCOHP*9431

Cultural Features

No Data

SITE DESIGN

Site Map Y - Yes

Mapped Date 11/19/2004

Designer March, M.A.

Boundary Justification

The boundary encompasses the element occurrences and immediate areas buffering hydrological processes (e.g., flooding) necessary for the viability of the elements. The boundary also identifies a buffer including the road and rangelands where direct disturbance and impacts from recreation and heavy grazing may contribute to excessive nutrients, sediment, and weed invasion. It should be noted that the boundary does not contain all hydrological processes necessary to the elements.

Primary Area 92.98 Acres 37.63 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B3: High Biodiversity Significance

Biodiversity Significance Comments

The site supports a fair (C-ranked) occurrence of the globally imperiled to globally vulnerable (G2G3/S2S3) riparian willow carr, *Salix ligulifolia*; and a good to fair (BC-ranked) example of a globally secure (G4), but vulnerable in the state (S3), riparian woodland, *Populus angustifolia*/*Cornus sericea*.

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

No Data

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>
24155	<i>Salix ligulifolia</i> Shrubland	Montane Willow Carr	G2G3	S2S3	Yes
24860	<i>Populus angustifolia</i> / <i>Cornus sericea</i> Woodland	Cottonwood Riparian Forest	G4	S3	No

REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
159567	Carsey, K. and M. Aitken. 1993. Colorado Natural Heritage Program San Juan National Forest Riparian Site Survey.
192742	March, M.A. 2005. Final Report: Natural Heritage Wetland Inventory of Dolores County. Colorado Natural Heritage Program, Fort Collins, 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: www.nrcs.usda.gov < http://www.nrcs.usda.gov >.

Level 4 Potential Conservation Area (PCA) Report

Name Glade Canyon Spring

Site Code S.USCOHP*9431

ADDITIONAL TOPICS

Additional Topics

Original site design by Kettler, S., 1997-06-09.

VERSION

Version Date 11/19/2004

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