

# Level 4 Potential Conservation Area (PCA) Report

Name Cleveland Gulch

Site Code S.USCOHP\*26775

## IDENTIFIERS

Site ID 2423 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 375636N  
State Colorado Longitude 1073130W

Quad Code Quad Name  
37107-H5 Handies Peak

County  
Hinsdale (CO)

Watershed Code Watershed Name  
14020002 Upper Gunnison

## SITE DESCRIPTION

<b>Minimum Elevation</b>	12,200.00	<b>Feet</b>	3,718.56	<b>Meters</b>
<b>Maximum Elevation</b>	12,280.00	<b>Feet</b>	3,742.94	<b>Meters</b>

### Site Description

The community occurrence is situated along the basin floor at the upper reaches of a large, open valley at the headwaters of Cleveland Gulch, a first order tributary of the Lake Fork of the Gunnison River. Surrounding mountains formed during the volcanic sequences of the western San Juans creating steep, scree slopes interspersed with seasonally saturated topographic rises. The wetland occurs along multiple seeps of similar contours at the base of surrounding scree fields. Seeps flood to the gently sloping basin floor, creating a complex of wetlands with mesic soils to shallow, open water pools. Soils vary from shallow histic epipedons over unconsolidated rock to histosols. Black alpine sedge (*Carex nigricans*) and Drummond's rush (*Juncus drummondii*) occur as small-patch communities in some areas and as minimal components of the larger wetland complex in other areas. Black alpine sedge forms near monocultures in multiple areas and is a consistent component throughout the upper reaches of the basin. Drummond's rush cover is patchy, but it is a consistent component throughout the wetland complex. Other graminoids common within the wetland include tufted hairgrass (*Deschampsia caespitosa*), sheep sedge (*Carex illota*), Tracy's rush (*Juncus tracyi*), and alpine timothy (*Phleum alpinum*). Water sedge (*Carex aquatilis*) is common in saturated areas and Altai cottongrass (*Eriophorum altaicum* var. *neogaeum*) is present at low cover. Common mesic forbs include white marsh marigold (*Caltha leptosepala*), American alpine speedwell (*Veronica wormskjoldii*), splitleaf groundsel (*Packera dimorphophylla*), and Parry's clover (*Trifolium parryi*). Drier species found along rises include Ross' avens (*Geum rossii*), pussytoes (*Antennaria* sp.), and creeping sibbaldia (*Sibbaldia procumbens*). No exotic species were observed. Surrounding uplands support very little vegetation and are dominated by unconsolidated rocks, with little soil development. Disturbances in the drainage are from past mining, with an old road grade still evident along side slopes and extensive mining along upper slopes. A stream running out of the upper basin shows evidence of aluminum precipitation along the stream bottom. These deposits are likely from draining from old mine sites upstream.

### Key Environmental Factors

Key environmental factors influencing species composition of the wetland are alpine elevation, low gradient, and perennial groundwater discharge.

### 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

### Cultural Features

No Data

# Level 4 Potential Conservation Area (PCA) Report

Name Cleveland Gulch

Site Code S.USCOHP\*26775

## 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 mining, improper recreational use, development, or water diversion could be detrimental to the site.

Primary Area 466.69 Acres 188.87 Hectares

## SITE SIGNIFICANCE

Biodiversity Significance Rank B4: Moderate Biodiversity Significance

### Biodiversity Significance Comments

This site is drawn for an excellent (A-ranked) occurrence of the globally vulnerable (G4?T3T4/S3) Altai cottongrass (*Eriophorum altaicum* var. *neogaeum*) and a good (B-ranked) occurrence of the globally unranked (GU/S2) black alpine sedge - Drummond's rush (*Carex nigricans* - *Juncus drummondii*) alpine herbaceous wetland community.

Other Values Rank V2 - High values

### Other Values Comments

Site provides aesthetic value and acts as a source of system biodiversity in the area. It also provides important wildlife habitat, aquifer recharge and discharge, and flood attenuation and storage.

## LAND MANAGEMENT ISSUES

### Land Use Comments

Predominant land use is recreation. There are multiple mining sites along adjacent uplands, however none appear active.

### Natural Hazard Comments

Natural hazards in the drainage include avalanches and falling rock.

### Exotics Comments

No exotics were observed.

### Offsite

Past mining in the drainage is the principal off-site concern.

### Information Needs

No Data

## ASSOCIATED ELEMENTS OF BIODIVERSITY

Element State ID	State Scientific Name	State Common Name	Global Rank	State Rank	Driving Site Rank
24886	<i>Carex nigricans</i> - <i>Juncus drummondii</i> Herbaceous Vegetation	Alpine Wetlands	GU	S2	Yes
21874	<i>Eriophorum altaicum</i> var. <i>neogaeum</i>	Altai cottongrass	G4?T3T4	S3	No

## REFERENCES

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.
194566	Steven, T.A. 1974. Geologic Map of the Durango Quadrangle, Southwestern Colorado. United States Geological Survey, Department of Interior, Reston, VA.
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.

# Level 4 Potential Conservation Area (PCA) Report

Name Cleveland Gulch

Site Code S.USCOHP\*26775

## ADDITIONAL TOPICS

### Additional Topics

No Data

## VERSION

Version Date 10/15/2006

Version Author Jones, J.R.

## 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