

Level 4 Potential Conservation Area (PCA) Report

Name Turkey Creek at Snowball Creek

Site Code S.USCOHP*25696

IDENTIFIERS

Site ID 2246 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 372302N
State Colorado Longitude 1065754W

<u>Quad Code</u>	<u>Quad Name</u>
37106-C8	Jackson Mountain
37106-D8	Saddle Mountain

County

Archuleta (CO)

<u>Watershed Code</u>	<u>Watershed Name</u>
14080101	Upper San Juan

SITE DESCRIPTION

Minimum Elevation	7,840.00	Feet	2,389.63	Meters
Maximum Elevation	8,280.00	Feet	2,523.74	Meters

Site Description

Turkey Creek is located in the north central portion of Archuleta County north of Jackson Mountain. It flows generally southward from its headwaters in Hinsdale County to its confluence with the San Juan River, north of Pagosa Springs. Turkey Creek flows through a moderately narrow montane valley with steep side slopes dominated by montane spruce-fir forests comprised of blue spruce (*Picea pungens*), corkbark fir (*Abies lasiocarpa* var. *arizonica*) and white fir (*Abies concolor*). Within this very productive valley, Turkey Creek, groundwater discharges, and seeps from an ill-defined ditch diversion (Snowball Ditch) support a lush diversity of riparian vegetation and mossy areas with tall mesic forbs. On a step of a northeast-facing side slope above Turkey Creek, retrorse sedge (*Carex retrorsa*) occupies the moist fringes of a depressional wetland. The wetland is groundwater and surface water fed, and overflow drains down slope into Turkey Creek. The pond displays a diverse vegetation structure; riparian shrub communities dominated by thinleaf alder (*Alnus incana*), red-osier dogwood (*Cornus sericea*), Rocky Mountain maple (*Acer glabrum*), park willow (*Salix monticola*) and tall mesic forbs occupy the south (north-facing) and west shorelines, which are steep and rocky. The more gently sloping shorelines of the wetland are dominated by retrorse sedge and meadow sedge (*Carex praticola*), with more saturated areas dominated by northern water plantain (*Alisma triviale*) and beaked sedge (*Carex utriculata*). Most of the pond is open, deeper water, while emergent vegetation including common spikerush (*Eleocharis palustris*) and narrowleaf bur-reed (*Sparganium angustifolium*) occur in shallow standing water near the shoreline. Soil on the shoreline is silty clay loam. Impacts due to recreation include dispersed campsites, fishing trails, and associated soil compaction and erosion, and some weed invasion by pasture grasses. Most impacts occur near the streambanks, and there are few direct impacts upslope at the wetland, which supports the element occurrence.

Key Environmental Factors

Field ecologists in 2005 found that retrorse sedge (*Carex retrorsa*) occupies clayey soils on muddy shorelines, and sometimes within shallow standing water, of depressional wetlands roughly between 8,000 and 9,500 feet elevation. Soils at the wetland shoreline display a single horizon (42 cm+) of silty clay loam with wood pieces and few roots. Water collected at 20 cm depth in the soil pit and soil was saturated to the surface.

Climate Description

No Data

Land Use History

No Data

Cultural Features

No Data

Level 4 Potential Conservation Area (PCA) Report

Name Turkey Creek at Snowball Creek

Site Code S.USCOHP*25696

SITE DESIGN

Site Map Y - Yes Mapped Date 10/05/2005

Designer March, M.A.

Boundary Justification

The boundary is drawn to encompass the ecological processes necessary for the viability of the element occurrence; specifically the immediate watershed and the groundwater and surface water flows that support the element occurrence. The boundary also identifies a buffer around the trails and dispersed campsites where surface runoff may contribute nutrients and sediment, and where impacts may promote weed invasion. It should be noted that not all the hydrologic processes necessary to the element occurrences are contained within the boundary.

Primary Area 356.46 Acres 144.26 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B4: Moderate Biodiversity Significance

Biodiversity Significance Comments

The site supports a good (B-ranked) example of the demonstrably globally secure (G5) and state critically imperiled (S1) retrorse sedge (*Carex retrorsa*). Retrorse sedge has a broad distribution throughout the north half of North America, but, as of 2005, is known only in Colorado from several locations in Archuleta County.

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

Weed invasion appears to be localized near trails. Referring to such resources as the Nature Conservancy's web site on invasive species (<http://tncweeds.ucdavis.edu/index.htm>) or <http://www.invasivespecies.gov/> may provide some assistance with control and eradication of non-native species.

Offsite

No Data

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>
20504	<i>Carex retrorsa</i>	retrorse sedge	G5	S1	Yes

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.
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.
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

No Data

Level 4 Potential Conservation Area (PCA) Report

Name Turkey Creek at Snowball Creek

Site Code S.USCOHP*25696

VERSION

Version Date 10/05/2005

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