

Level 4 Potential Conservation Area (PCA) Report

Name Soda Springs at Watson Mountain

Site Code S.USCOHP*27977

IDENTIFIERS

Site ID 2665 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 405444N
State Colorado Longitude 1061901W

Quad Code Quad Name

40106-H3 Northgate

County

Jackson (CO)

Watershed Code Watershed Name

10180001 North Platte Headwaters

SITE DESCRIPTION

Minimum Elevation	7,800.00 Feet	2,377.44 Meters
Maximum Elevation	7,950.00 Feet	2,423.16 Meters

Site Description

The Soda Springs at Watson Mountain site is located on the south side of Watson Mountain, a metamorphic rock of the Precambrian Age, in northern Jackson County. The site encompasses a groundwater discharge area that is approximately 1 mile long. Additional water is likely contributing to the wetland via the Capron Ditch that runs parallel to the site. The vegetation is a mosaic of alkaline and fen plant associations defined by saturation of soils. Analogue sedge (*Carex simulata*) occurs at the east side of the site where there is a viable spring that has started the formation of a fen (more than 40 cm of histosols). Nebraska sedge (*Carex nebrascensis*) and beaked sedge (*C. utriculata*) ring the fen. The other plant association mosaics are tolerant of alkaline soils, where the soils are dry during a portion of the growing season, therefore creating alkaline conditions. These plants include alkali cordgrass (*Spartina gracilis*), alkali grass (*Puccinellia airoides*), Baltic rush (*Juncus balticus*), spikerush (*Eleocharis palustris*), popcorn flower (*Plagiobothrys scouleri*), sea milkwort (*Glaux maritima*), arrowgrass (*Triglochin maritima*), silvery primrose (*Primula incana*), blue-eyed grass (*Sisyrinchium montanum*), weak groundsel (*Packera debilis*), falsegold groundsel (*P. pseud aurea*), and meadow lousewort (*Pedicularis crenulata*). The soils in this portion of the site are characterized with saline deposits and marl deposits in areas of open water with a pH of 6.3. The uplands consist of sagebrush (*Artemisia tridentata* var. *pauciflora*, *A. tridentata* var. *wyomingensis* and *A. cana*) shrublands.

Key Environmental Factors

Key factors include unaltered hydrology or groundwater discharge that creates saturated soils so that peat can continue to form.

Climate Description

The site is located in an intermountain basin that is enclosed on most sides by mountains that create precipitation shadows for air and moisture. Climate records for Walden indicate a mean annual precipitation of 10.53 inches (WRCC 2009). Annual mean for snowfall is 57.1 inches. The lowest average temperature (Jan.) is 3.9 degrees F and the highest average temperature (July) is 78.5 degrees F.

Land Use History

No Data

Cultural Features

No Data

SITE DESIGN

Site Map Y - Yes Mapped Date 10/26/2009

Designer Culver, D.R.

Boundary Justification

Boundaries are drawn to capture the immediate watershed that starts below the south flank of Watson

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Mountain. The boundaries were developed to include immediate ecological processes. Specifically the primary ecological process is hydrology, especially groundwater discharge (Rondeau 2001). Only private lands with written permission were surveyed.

Primary Area 316.48 Acres 128.08 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B3: High Biodiversity Significance

Biodiversity Significance Comments

The site supports a good (B-ranked) occurrence of a globally vulnerable (G3/S2) sea milkwort (*Glaux maritima*) herbaceous vegetation, an excellent (A-ranked) occurrence of a state rare (G4/S3) *Carex simulata* wet meadow, an excellent (A-ranked) occurrence of a *Triglochin maritima* Western Slope salt meadow whose global rank is unknown (GU/SU) and an excellent (A-ranked) occurrence of a state imperiled (G4/S1) plant, Rocky Mountain ragwort (*Packera debilis*). An historical occurrence of wild chives (*Allium schoenoprasum* var. *sibiricum*), a state imperiled (G5T5/S1) plant, was documented in the early 1900s, but current information is needed to identify the precise location and quality of the rare plant populations.

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

No Data

Information Needs

Current field surveys are needed to identify the precise location and quality of wild chive (*Allium schoenoprasum* var. *sibiricum*) populations.

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>
16887	<i>Carex simulata</i> Herbaceous Vegetation	Wet Meadow	G4	S3	No
40642	<i>Glaux maritima</i> Herbaceous Vegetation [Provisional]	Sea Milkwort	G3	S2	Yes
18327	<i>Triglochin maritima</i> Herbaceous Vegetation	Western Slope Salt Meadows	GU	SU	No
22365	<i>Packera debilis</i>	Rocky Mountain ragwort	G4	S1	No

REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
198407	Culver, D.R., K. Decker, J. Parker, J. Bell, J. Sovell, and J. Huggins. 2010. CNHP Final Report: Identification and Assessment of Important Wetlands within the North Platte Watershed, CO. Colorado Natural Heritage Program, Fort Collins, CO.
190863	Rondeau, R. 2001. Ecological system viability specifications for Southern Rocky Mountain ecoregion. First Edition. Colorado Natural Heritage Program, Colorado State University, Fort Collins, CO. 181 pp.
198320	Western Regional Climate Center. 2009. Record Climate Summaries. Accessed in 2009. http://www.wrcc.dri.edu/

ADDITIONAL TOPICS

Additional Topics

No Data

VERSION

Version Date 10/26/2009

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Version Author Culver, D.R.

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