

Level 4 Potential Conservation Area (PCA) Report

Name North Boettcher Lake

Site Code S.USCOHP*27995

IDENTIFIERS

Site ID 2677 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 405147N
State Colorado Longitude 1063043W

Quad Code Quad Name

40106-G5	Boettcher Lake
40106-G4	Lake John
40106-H5	Pearl

County

Jackson (CO)

Watershed Code Watershed Name

10180001	North Platte Headwaters
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SITE DESCRIPTION

Minimum Elevation	8,100.00 Feet	2,468.88 Meters
Maximum Elevation	8,200.00 Feet	2,499.36 Meters

Site Description

The North Boettcher Lake site is located on the northeastern flank of Sheep Mountain. It encompasses a series of ponds that retain water for irrigation. The source of water is likely from springs with contributions from irrigation ditches e.g., Hill Ditch No. 1. The vegetation that surrounds the ponds are alkaline. The vegetation forms a mosaic that is defined by saturation and alkalinity. There is a peat-forming wetland that contains approximately 10 inches (25 cm) of peat at the surface with heavy sulfurous odor. The fen is dominated by water sedge (*Carex aquatilis*), beaked sedge (*C. utriculata*), and woolly sedge (*C. lanuginosa*). The more alkaline areas are dominated by milky seawort (*Glaux maritima*) with arrowgrass (*Triglochin maritima*), Baltic rush (*Juncus balticus*), Sandberg bluegrass (*Poa secunda*), salt grass (*Distichlis spicata*), foxtail barley (*Hordeum jubatum*), spike rush (*Eleocharis palustris*) and redwool plantain (*Plantago eriopoda*) the open water areas are dominated by bulrush (*Schoenoplectus lacustris* ssp. *acutus*), and three square (*Scirpus pungens*). The uplands consist of sagebrush (*Artemisia tridentata* var. *pauciflora*, *A. tridentata* var. *wyomingensis* and *A. cana*) shrublands.

Key Environmental Factors

Intact hydrology is necessary for the continual formation of peat.

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 11/05/2009
Designer Culver, D.R.

Boundary Justification

Boundaries are drawn to capture the immediate watershed that starts east of Sheep Mountain ridge and west of Lake Creek. The eastern boundary is the top of Sheep Mountain and the west boundary incorporates several of the tributaries of the North Fork. The boundaries were developed to include immediate ecological

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processes. Specifically the primary ecological process is hydrology, especially surface flow and groundwater discharge (Rondeau 2001). Only private lands with written permission were surveyed

Primary Area 1,710.51 Acres 692.22 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B3: High Biodiversity Significance

Biodiversity Significance Comments

The site supports an excellent (A-ranked) occurrence of the globally vulnerable (G3/S2) sea milkwort (*Glaux maritima*) herbaceous vegetation community.

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

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>			
40642	<i>Glaux maritima</i> Herbaceous Vegetation [Provisional]	Sea Milkwort	G3	S2	Yes

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 11/05/2009

Version Author Culver, D.R.

Disclaimer

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