

Level 4 Potential Conservation Area (PCA) Report

Name Kettle Ponds at Grand Lake

Site Code S.USCOHP*25932

IDENTIFIERS

Site ID 2310 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 401449N
State Colorado Longitude 1055114W

Quad Code Quad Name

40105-C7 Grand Lake
40105-B7 Shadow Mountain

County

Grand (CO)

Watershed Code Watershed Name

14010001 Colorado headwaters

SITE DESCRIPTION

Minimum Elevation	8,635.00 Feet	2,631.95 Meters
Maximum Elevation	8,680.00 Feet	2,645.66 Meters

Site Description

Community occurs along second kettle pond in a series of five ponds. Ponds are glacial relics which grade from open water aquatic at their centers to inundated, to saturated, to mesic soils. There is a distinct transition from wetlands dominated by mesic graminoids to upland of xeric woodland. Surrounding uplands are dominated by lodgepole pine (*Pinus contorta*) overstory with a whortleberry (*Vaccinium* sp.) / kinnikinnick (*Arctostaphylos uva-ursi*) understory. Ponds are separated by this xeric woodland community. Ponds are seral and have residual areas of open water surrounded by inundated to seasonally saturated soils. Many aquatic species are present throughout, with beaked sedge (*Carex utriculata*) being the dominant species in all areas except for the area dominated by American mannagrass (*Glyceria grandis*). Soils are composed of silty clay loams with consistent mottling throughout indicating seasonal drying likely in the fall and winter. Geology consists of unconsolidated surficial deposits and rocks of the Quaternary Age, specifically glacial drift of the Pinedale and Bull lake glaciations. Disturbances include adjacent golf course parking lot, golf course, and gardens and recreational use of the area by a system of trails. The wetlands do not seem impacted by recreational use due to little use and inundated soils.

Key Environmental Factors

Key environmental factors influencing the biota of the site are slope shape due to glacial formation, soil type, and precipitation.

Climate Description

Climate likely follows typical patterns of this region of Colorado being generally xeric throughout the year with a wet spring season and later summer "monsoons".

Land Use History

No Data

Cultural Features

No Data

SITE DESIGN

Site Map Y - Yes Mapped Date 12/07/2005
Designer Jones, J.R.

Boundary Justification

Boundary is drawn to encompass five kettle ponds along the northwestern edge of Shadow Mountain Reservoir. Ponds are self-contained and depend mostly on precipitation as their main source of water. Water levels may be influenced by fluctuations in water table. Not all ecological processes important to the site are included in the boundaries and activities such as development in the area may be deleterious to the

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hydrology and health of the ponds by adding sediment and toxins.

Primary Area 70.20 Acres 28.41 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B2: Very High Biodiversity Significance

Biodiversity Significance Comments

This site is drawn for a good (B-ranked) occurrence of a globally imperiled (G2?/S2) plant community of American mannagrass (*Glyceria grandis*) herbaceous vegetation and a good (B-ranked) occurrence of a globally demonstrably secure (G5/S3) amphibian, wood frog (*Rana sylvatica*).

Other Values Rank V2 - High values

Other Values Comments

As part of Grand Lake Recreation Area, ponds provide both aesthetics and open space. They also provide excellent wildlife habitat for amphibians, insects, waterfowl, deer, and elk.

LAND MANAGEMENT ISSUES

Land Use Comments

Land is currently utilized for recreational purposes including hiking, biking, skiing, and snowshoeing. Immediately adjacent to the site is a golf course and parking lot.

Natural Hazard Comments

Inundated soils are difficult to walk in and centers of ponds have areas of deep water.

Exotics Comments

Site harbors very few exotic species. Dock (*Rumex* sp.) was found in one of the ponds, but it was not positively identified as the non-native species.

Offsite

Off-site considerations include golf course and parking lots just north of ponds, which may add sediment and toxins to the system. As well, property to the west of the site is developed with a complex of housing, septic, water, electric, and road systems.

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>
17095	<i>Rana sylvatica</i>	Wood Frog	G5	S3	No
19090	<i>Glyceria grandis</i> Herbaceous Vegetation	American Mannagrass	G2?	S2	Yes

REFERENCES

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<u>Reference ID</u>	<u>Full Citation</u>
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193632	Culver, D.R. and Jones, J.R. 2006. Final Report: Survey of Critical Biological Resources in Grand County. Colorado Natural Heritage Program, Fort Collins, CO.
160140	Dorn, R. D. 1997. Rocky Mountain Region Willow Identification Field Guide. Renewable Resources R2-RR-97-01. Denver, CO: USDA, Forest Service, Rocky Mountain Region. 107p.
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ADDITIONAL TOPICS

Additional Topics

No Data

VERSION

Version Date 12/07/2005

Version Author Jones, J.R.

Disclaimer

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