

Level 4 Potential Conservation Area (PCA) Report

Name Six and Fifty Reservoir

Site Code S.USCOHP*6184

IDENTIFIERS

Site ID 1831 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 391436N
State Colorado Longitude 1085725W

<u>Quad Code</u>	<u>Quad Name</u>
39108-C8	Badger Wash
39108-B8	Ruby Canyon
39109-B1	Bitter Creek Well

County

Mesa (CO)

<u>Watershed Code</u>	<u>Watershed Name</u>
14010005	Colorado headwaters-Plateau

SITE DESCRIPTION

Minimum Elevation	4,900.00	Feet	1,494.00	Meters
Maximum Elevation	5,400.00	Feet	1,646.00	Meters

Site Description

The Six and Fifty Reservoir site, which straddles highways 6 and 50 west of Mack, is an area of low, rolling, shale hills and desert shrub vegetation. Depending on slope and aspect, dominant shrub species on the slopes are *Atriplex confertifolia*, *Atriplex corrugata*, and *Atriplex gardneri*. Associated native grasses are *Hilaria jamesii*, *Oryzopsis hymenoides*, and *Leymus salina*, and common forbs are *Xylorhiza venusta* and *Stanleya pinnata*. The rare Grand buckwheat (*Eriogonum contortum*) is abundant on ridges and in small drainages, often associated with gardner saltbush and poison aster. Similar habitats support the less abundant tall cryptanth (*Cryptantha elata*). Flat bottomlands are covered by a combination of greasewood, usually with an understory of cheatgrass, or mat saltbush on barren shale, while the drainages of intermittent and perennial streams have been invaded by tamarisk, Russian olive, and other invasive species. Other common species are rabbitbrushes, spiny horsebrush, budsage, inflated buckwheat, and winterfat. Recently disturbed areas are invaded by Russian thistle and cheatgrass. In spite of heavy grazing, patches of Indian rice grass in good condition, with few exotic species, are indicative of the potential natural community here. A significant feature is the Six and Fifty Reservoir for which the site is named. The reservoir provides an important stopover and feeding area for many species of wildlife. The water provided by the reservoir serves as a valuable resource to birds, small mammals, and other species in this arid salt desert environment.

Key Environmental Factors

The key environmental factors are the convergence of climatic and edaphic factors. The soils are derived primarily from sandstone and shale parent material and range from sandy to very rocky. Together with the dry arid climate, the geology provides conditions which support several imperiled plant species and salt-desert plant associations.

Climate Description

The climate is characterized as arid semi-desert. The average maximum summer daytime temperature is 93 (deg F) and nighttime minimums of 57 (deg F). Summer maxima may be as high as 110 (deg F). Average winter daytime and nighttime temperature extremes are 38 (deg F) and 12 (deg F), respectively. Precipitation averages less than 8.64 inches per year and primarily occurs in the late summer and fall as rain. (WRCC 2004)

Land Use History

The land has supported a wide range of human uses, including livestock grazing, quarrying, and off-road recreation. Currently much of the site is within the Colorado Canyons National Conservation Area, and is used under multiple-use doctrines for motorized and non-motorized recreation and livestock grazing.

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Cultural Features

No Data

SITE DESIGN

Site Map P - Partial

Mapped Date 12/01/1996

Designer Lyon, M.J.

Boundary Justification

The boundary was drawn to identify the minimum area recommended for protection of the primary elements located in the area. The elements primarily driving the site design are the Eastwood evening-primrose (*Camissonia eastwoodiae*), western slope grasslands (*Achnatherum hymenoides* shale barren), and Gardner's mat saltbush shrublands (*Atriplex gardneri* / *Leymus salinus*). Additional noteworthy elements include Grand buckwheat (*Eriogonum contortum*), cliffdweller's candlestick catseye (*Oreocarya elata*), Gardner's mat saltbush shrublands (*Atriplex gardneri* / *Hilaria jamesii*), cold desert shrublands (*Atriplex confertifolia* / *Leymus salinus*), Gray Vireo (*Vireo vicinior*), and longnose leopard lizard (*Gambelia wislizenii*). The boundaries include the element occurrences and adjacent habitat for the plant and animal species and significant plant communities of the area. While the entire site is located on BLM lands, the majority is within the CCNCA.

Primary Area 6,374.71 Acres

2,579.76 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B2: Very High Biodiversity Significance

Biodiversity Significance Comments

The Six and Fifty Site contains an excellent (A-ranked) occurrence of a globally imperiled (G2/S1) plant species, Eastwood evening-primrose (*Camissonia eastwoodiae*), and good (B-ranked) and fair (C-ranked) occurrences of two globally imperiled (G2/S2) plant communities, *Atriplex gardneri* / *Leymus salinus* and *Achnatherum hymenoides*. Other elements included in the site are several occurrences of fair (C-ranked) globally vulnerable plant communities and good (B-ranked) occurrences of globally vulnerable plant species.

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

Bromus tectorum, *Tamarix ramosissima*, and *Salsola australis*.

Offsite

No Data

Information Needs

No Data

ASSOCIATED ELEMENTS OF BIODIVERSITY

<u>Element</u>	<u>State Scientific Name</u>	<u>State Common Name</u>	<u>Global Rank</u>	<u>State Rank</u>	<u>Driving Site Rank</u>
24655	<i>Atriplex confertifolia</i> / <i>Leymus salinus</i> Shrubland	Cold Desert Shrublands	G3G5	S3	No
18559	<i>Eriogonum contortum</i>	grand buckwheat	G3	S2	No
24779	<i>Achnatherum hymenoides</i> Shale Barren Herbaceous Vegetation	Western Slope Grasslands	G2	S2	Yes
24633	<i>Atriplex gardneri</i> / <i>Leymus salinus</i> Dwarf-shrubland	Gardner's Mat Saltbush Shrublands	G2?	S2?	Yes
18868	<i>Mustela nigripes</i>	Black-footed Ferret	G1	S1	No
18312	<i>Gambelia wislizenii</i>	Longnose Leopard Lizard	G5	S1	No
24633	<i>Atriplex gardneri</i> / <i>Leymus salinus</i> Dwarf-shrubland	Gardner's Mat Saltbush Shrublands	G2?	S2?	No

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24579 <i>Atriplex gardneri</i> / <i>Pleuraphis jamesii</i> Dwarf-shrubland	Gardner's Mat Saltbush Shrublands	G3G5 S1? No
24515 <i>Atriplex corrugata</i> Dwarf-shrubland	Alkali Mat Saltbush Shrublands	G5 S2? No
16911 <i>Camissonia eastwoodiae</i>	Eastwood evening-primrose	G2 S1 Yes
18668 <i>Vireo vicinior</i>	Gray Vireo	G4 S2B No
20637 <i>Plegadis chihi</i>	White-faced Ibis	G5 S2B No
21817 <i>Himantopus mexicanus</i>	Black-necked Stilt	G5 S3B No
18794 <i>Oreocarya elata</i>	cliff dweller's candlestick catseye	G3 S2 No

REFERENCES

Reference ID	Full Citation
173289	Lyon, P., C. Pague, R. Rondeau, L. Renner, C. Slater, and C. Richard. 1996. Final Report: Natural Heritage Inventory of Mesa County, Colorado. Colorado Natural Heritage Program, Fort Collins, CO.
184712	Stevens, J.E. 2004. Final Report: Biological Inventory of Colorado Canyons NCA. Colorado Natural Heritage Program, Fort Collins, CO.

ADDITIONAL TOPICS

Additional Topics

No Data

VERSION

Version Date	02/28/2004
Version Author	Stevens, J.E.

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