

Level 4 Potential Conservation Area (PCA) Report

Name Grape Creek Water Gap

Site Code S.USCOHP*26796

IDENTIFIERS

Site ID 2427 Site Class PCA
 Site Alias None

Network of Conservation Areas (NCA)

NCA Site ID	NCA Site Code	NCA Site Name
2466	S.USCOHP*27035	Arkansas Valley Barrens

LOCATORS

Nation United States Latitude 382512N
 State Colorado Longitude 1051601W

Quad Code Quad Name
 38105-D3 Royal Gorge

County
 Fremont (CO)

Watershed Code Watershed Name
 11020002 Upper Arkansas
 11020001 Arkansas Headwaters

SITE DESCRIPTION

Minimum Elevation	5,385.00 Feet	1,641.35 Meters
Maximum Elevation	6,045.00 Feet	1,842.52 Meters

Site Description

This site is characterized by a series of hogbacks on the edge of a large expanse of rugged, lower montane, granitic hills. There are two low hogbacks of Niobrara shale on the east side of the area and a tall, sharp hogback of Fountain Formation (sandstone with limestone inclusions) on the west side that is immediately above Grape Creek, a perennial tributary of the Arkansas River. Rock outcrops and unvegetated granite slabs are common on the slopes of the taller western hogback, which is cut by a drainage flowing into Grape Creek. Just to the north above the water gap, there is old clay mining activity and infrastructure. Sparse pinon - juniper (*Pinus edulis* - *Juniperus monosperma*) woodland occupies the rocky slopes of the hogbacks. The lower Niobrara hogbacks also have mountain mahogany (*Cercocarpus montanus*), Bigelow sage (*Artemisia bigelovii*), and frankenia (*Frankenia jamesii*) shrubs plus sparse, mostly low-growing herbs, such as ricegrass (*Oryzopsis hymenoides*), New Mexico feathergrass (*Hesperostipa neomexicana*), spearleaf buckwheat (*Erigonum fendleriana*), three awn (*Aristida purpurea*), James' prairie clover (*Dalea jamesii*), stemless daisy (*Hymenoxys acaulis*), blue grama (*Bouteloua gracilis*), and hairy woollygrass (*Erioneuron pilosum*). The taller Fountain Formation hogback has shrubs like California brickellbush (*Brickellia californica*) and hoptree (*Ptelea trifoliata*) with diverse graminoids like little bluestem (*Schizachyrium scoparium*), sideoats grama (*Bouteloua curtipendula*), hairy grama (*Bouteloua hirsuta*), bush muhly (*Muhlenbergia porteri*), California oatgrass (*Danthonia californicus*), common wolfstail (*Lycurus phleoides*), and poverty threeawn (*Aristida divaricata*) plus large hedgehog cactus (*Echinocereus triglochidiatus*), dwarf Indian mallow (*Abutilon parvulum*), chickenthiel (*Mentzelia oligosperma*), and narrowleaf four o'clock (*Oxybaphus linearis*). The intervening valleys are occupied by gypsiferous grasslands. The gypsiferous grasslands are unique in character, having selenium influence and a different species composition. Graminoids are unique and include burrograss (*Scleropogon brevifolius*), ear muhly (*Muhlenbergia arenacea*), vine mesquite (*Panicum obtusum*), and Texas dropseed (*Sporobolus texanus*) in addition to more common blue grama (*Bouteloua gracilis*), green needlegrass (*Stipa viridula*), bottlebrush grass (*Elymus elymoides*), and sand dropseed (*Sporobolus cryptandrus*). Prince's plume (*Stanleya pinnata*), a selenium indicator, is abundant in some locations.

Key Environmental Factors

No Data

Climate Description

No Data

Land Use History

Past clay mining activity

Cultural Features

No Data

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SITE DESIGN

Site Map P - Partial

Mapped Date 03/06/2007

Designer Neid, S.L.

Boundary Justification

This boundary includes known occurrences of rare plants as well as some adjacent suitable natural habitat.

Primary Area 315.60 Acres

127.72 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/S3) Rocky Mountain bladderpod (*Lesquerella calcicola*) and a good (B-ranked) occurrence of the state rare (G5/S2) Wright's cliff-brake (*Pellaea wrightiana*).

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

Exotic species present include Russian thistle (*Salsola australis*), kochia (*Kochia scoparia*), and limited tamarisk (*Tamarix ramosissima*). The tamarisk occurs in the drainage above the water gap.

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>
19618	<i>Pellaea wrightiana</i>	Wright's cliff-brake	G5	S2	No
21031	<i>Lesquerella calcicola</i>	Rocky Mountain bladderpod	G3	S3	Yes

REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
194663	Neid, S.L. 2007. Final Report: Rare Plant Survey of Select Bureau of Land Management Lands in the Arkansas River Canyon, Chaffee and Fremont Counties, Colorado. Colorado Natural Heritage Program, Fort Collins, CO.

ADDITIONAL TOPICS

Additional Topics

No Data

VERSION

Version Date 03/06/2007

Version Author Neid, S.L.

Disclaimer

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