

Level 4 Potential Conservation Area (PCA) Report

Name Dolores Canyon-Slick Rock to Bedrock

Site Code S.USCOHP*1575

IDENTIFIERS

Site ID 949 Site Class PCA
 Site Alias Dolores River at Anderson Mesa
 Site Alias Dolores River at Andy's Mesa

Network of Conservation Areas (NCA)

NCA Site ID	NCA Site Code	NCA Site Name
-		No Data

LOCATORS

Nation United States Latitude 380914N
 State Colorado Longitude 1085252W

Quad Code	Quad Name
38108-B8	Anderson Mesa
38108-A7	Hamm Canyon
38108-C8	Paradox
38108-A8	Horse Range Mesa
37108-H7	Joe Davis Hill
38108-B7	Bull Canyon

County

Montrose (CO)
 San Miguel (CO)

Watershed Code	Watershed Name
14030002	Upper Dolores

SITE DESCRIPTION

Minimum Elevation	4,966.00 Feet	1,513.64 Meters
Maximum Elevation	5,500.00 Feet	1,676.40 Meters

Site Description

The Dolores River has carved a spectacular, deep canyon through Jurassic and Triassic sandstones. Steep vertical cliffs dominate the canyonsides, broken only when tributaries enter the canyon. Major geologic formations in the canyon are Wingate, Kayenta, Navajo and Entrada sandstones. The Morrison Formation appears near the southern end. This site includes the riparian zone and adjacent uplands along the Dolores River for approximately fifty miles, from Slick Rock north to Bedrock. Most of this area is roadless and accessible only by raft, canoe or kayak. The canyon bottoms support a nearly continuous occurrence of the riparian plant association known as New Mexico privet foothills riparian shrubland. Typical vegetation along the river includes a band of coyote willow, mixed with giant reed at the water's edge between the low and high water marks. On slightly higher ground is a band of New Mexico privet, often accompanied by skunkbrush, big sagebrush, giant reed and wild rose. Cottonwoods and box elders are occasional. Most of this area has few weeds, and surprisingly little tamarisk compared with other parts of the river. In an alcove seep at river mile 77.5, CNHP researchers found a hanging garden community with Eastwood's monkeyflower and Mancos columbine. While the columbine was abundant, the monkeyflower was represented by only six plants. Adjacent species were Utah juniper, Mormon tea, skunkbrush, single leaf ash, New Mexico privet, and two ferns, purple cliffbrake and slender lip-fern. Kachina daisy, historically documented in the area, was not present. Several other alcoves in this stretch were investigated, but did not contain any of the targeted species. A cliff base just upstream of Spring Creek was the site of a good population of helleborine orchids. Another smaller occurrence was found below the seep at mile 77.5. Uplands in this area have pinon - juniper woodlands, sagebrush, or barren sandstone cliffs. Naturita milkvetch was found in the pinon - juniper community at a campsite at mile 72. Benches sometimes have patches of native grasslands. Relic patches of high quality grasslands were identified by BLM in 1980. Formerly known as "*Stipa comata* - West", this community is now called *Hesperostipa comata*, or "needle and thread Great Basin herbaceous vegetation". The species composition of the communities varies. It usually includes, in addition to needle-and-thread grass, galleta, Indian ricegrass, and blue grama. In the occurrences in this site, needle-and-thread was the dominant grass, ranging from 6% to 20% cover and blue grama accounted for 1% to 11% cover. This area also has a number of occurrences of animal species with conservation significance, the rarest of which is the roundtail chub.

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Key Environmental Factors

No Data

Climate Description

No Data

Land Use History

No Data

Cultural Features

No Data

SITE DESIGN

Site Map P - Partial

Mapped Date 10/16/2005

Designer Lyon, M.J.

Boundary Justification

The boundary is drawn to include the riparian zone of the Dolores Canyon, as well as upland benches that contain relic grassland communities. It encompasses both the river itself, containing the chub population, and cliffsides that provide habitat for Peregrine Falcons. Although not drawn for this species, peregrine eyries occur along the cliff tops to approximately 100 feet below the cliff tops of the Dolores River Canyon.

Hydrological processes originating upstream, and not included within the boundary, particularly the regulation of water flows at McPhee Reservoir, have a profound effect on this site. The health of the riparian vegetation as well as the endangered fish is dependent on the timing and adequacy of flows. Likewise, upland diversions of water could have a detrimental effect on the hanging garden communities.

Primary Area 18,083.22 Acres

7,318.05 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B2: Very High Biodiversity Significance

Biodiversity Significance Comments

The site supports two excellent (A-ranked) occurrences of a globally imperiled (G1G2/S1) New Mexico privet riparian shrub community (*Forestiera pubescens*) along the Dolores River. This plant community is known only from the major rivers in the Four Corners area. A good (B-ranked) occurrence of the Naturita milkvetch (*Astragalus naturitensis*), considered to be imperiled to vulnerable both globally and in Colorado (G2G3/S2S3) was located. Hanging garden communities (*Aquilegia micrantha* - *Mimulus eastwoodiae*), imperiled to vulnerable on a global scale (G2G3/S2S3), contained small populations of the globally vulnerable (G3/S1) Eastwood monkeyflower (*Mimulus eastwoodiae*). Paradox breadroot (*Pediomelum aromaticum*) was located near Bedrock in 1981. Excellent to good (AB-ranked) occurrences of the globally common (G5/S5) coyote willow / mesic graminoids (*Salix exigua* / mesic graminoids) were identified in 1991. A fair (C-ranked) occurrence of the state rare (G5/S2S3) Yuma Skipper (*Ochlodes yuma*) has been documented. Additionally, the Dolores River throughout the length of the site supports populations of the globally vulnerable (G3/S2) roundtail chub (*Gila robusta*). Colorado populations of the chub are at the upstream margin of the species' range and comprise the majority of occurrences for this 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

No Data

Offsite

The surrounding landscape includes a highway and grazed areas.

Information Needs

No Data

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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>
19709	<i>Forestiera pubescens</i> Shrubland	Foothills Riparian Shrubland	G1G2	S1	Yes
24872	<i>Salix exigua</i> / Mesic Graminoids Shrubland	Coyote Willow/Mesic Graminoid	G5	S5	No
18115	<i>Pediomelum aromaticum</i>	Paradox breadroot	G3	S2	No
18115	<i>Pediomelum aromaticum</i>	Paradox breadroot	G3	S2	No
21230	<i>Mimulus eastwoodiae</i>	Eastwood monkey-flower	G3G4	S1	No
24552	<i>Aquilegia micrantha</i> - <i>Mimulus eastwoodiae</i> Herbaceous Vegetation	Hanging Gardens	G2G3	S2S3	No
21647	<i>Astragalus naturitensis</i>	Naturita milkvetch	G2G3	S2S3	No
20765	<i>Gila robusta</i>	Roundtail Chub	G3	S2	No
21939	<i>Pellaea suksdorfiana</i>	smooth cliff-brake	G5T4?	S2	No
17626	<i>Epipactis gigantea</i>	helleborine	G4	S2S3	No
19709	<i>Forestiera pubescens</i> Shrubland	Foothills Riparian Shrubland	G1G2	S1	Yes
24872	<i>Salix exigua</i> / Mesic Graminoids Shrubland	Coyote Willow/Mesic Graminoid	G5	S5	No
22094	<i>Ochloides yuma</i>	Yuma Skipper	G5	S2S3	No

REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
192792	Lyon, P. and J. Sovell. 2000. Final Report: A Natural Heritage Assessment, San Miguel and Western Montrose Counties, Colorado. Colorado Natural Heritage Program, Fort Collins, CO.
160208	Woodling, J. 1985. Colorado's Little Fish: A Guide to the Minnows and Other Lesser Known Fishes in the State of Colorado. Colorado Division of Wildlife, Denver.

ADDITIONAL TOPICS

Additional Topics

Original site design by Loar, A.M. 1996-09-25.

VERSION

Version Date	10/16/2005
Version Author	Lyon, M.J.

Disclaimer

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