Level 4 Potential Conservation Area (PCA) Report

Name Big Dominguez Creek **Site Code** S.USCOHP*279

IDENTIFIERS

Site ID 1148 **Site Class** PCA

Site Alias Dominquez Canyon

Network of Conservation Areas (NCA)

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

LOCATORS

Nation United States **Latitude** 384537N

State Colorado **Longitude** 1082949W

Quad Code	Quad Name
38108-G4	Triangle Mesa
38108-F5	Keith Creek
38108-G5	Jacks Canyon
38108-G3	Dominguez

County

Delta (CO)

Mesa (CO)

Watershed Code	Watershed Name
14020005	Lower Gunnison

SITE DESCRIPTION

Minimum Elevation	4,800.00	**Feet**	1,463.00	**Meters**
Maximum Elevation	9,000.00	**Feet**	2,743.00	**Meters**

Site Description

Dominguez Creek supports excellent riparian vegetation with a diversity of plant species, vigorous growth of vegetation, low abundance of non-native aggressive species, and diversity of vegetation structure. In a stretch of about sixteen air miles from Carson Hole on the Uncompahgre Plateau to the Gunnison River, this beautiful stream descends from 9,000 to 4,800 ft., transitioning from coniferous forests to desert shrubs and cactus. Near the headwaters, mountain willow (*Salix monticola*) is common along the stream banks. Downstream, in the area of Big Dominguez Campground, the rushing stream forms small waterfalls and trout-filled plunge pools in the Precambrian rock. Riparian vegetation along this middle reach is very lush and diverse. Woolly sedge (*Carex pellita*), cloaked bulrush (*Scirpus pallidus*), Baltic rush (*Juncus balticus*), redtop (*Agrostis gigantea*), fowl mannagrass (*Glyceria striata*), horsetail (*Equisetum arvense*), scouring rush (*Hippochaete laevigata*), wild licorice (*Glycyrrhiza lepidota*), false-Solomon's seal (*Maianthemum stellata*), and canyon bog orchid (*Limnorchis ensifolia*) line the banks, while blue spruce (*Picea pungens*) and narrowleaf cottonwood (*Populus angustifolia*) tower above thickets of river birch (*Betula occidentalis*), thinleaf alder (*Alnus incana*), coyote willow (*Salix exigua*), and red-osier dogwood (*Cornus sericea*). Approximately one to two miles downstream of the campground, beaver ponds have formed an extensive wetland complex consisting of open still water, scrub-shrub, and emergent wetlands. Above the creek, on the canyonsides, the bright green of pinon - juniper contrast with red sandstone cliffs. Farther downstream, Plains cottonwood (*Populus deltoides* ssp. *wislizeni*) replaces the narrowleaf, as the canyon bottom winds below sheer Wingate sandstone cliffs. Two rare plants are found above the creek: Grand Junction milkvetch (*Astragalus linifolius*) grows on rocky slopes and in draws in the pinon - juniper zone, while Colorado hookless cactus (*Sclerocactus glaucus*) is found in the lower reaches of the canyon in desert shrub communities. Soils along Big Dominguez Creek are alluvium and generally not mapped on the County soil survey. The Glenberg series, Coarse-loamy, mixed (calcareous), mesic, Ustic Torrifluvents is shown to occur on floodplain terraces within the site (Soil Conservation Service 1978).

Key Environmental Factors

No Data

Climate Description

Arid semi-desert.

Land Use History

Grazed, oil and gas development and exploration.

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Cultural Features

No Data

SITE DESIGN

Site Map Y - Yes **Mapped Date** 12/03/2001

Designer Rocchio, F.J.

Boundary Justification

Boundaries are drawn to encompass the ecological processes believed necessary for long term viability of the elements. These boundaries will ensure continued natural surface flow and thus allow fluvial processes such as flood scouring, lateral flow, and channel meandering, to maintain a dynamic distribution of riparian and wetland plant associations along the drainage. It is mapped as a separate site from the biologically similar Little Dominguez Creek, because it is recognized by the public and BLM as a distinct area.

Primary Area 7,221.86 **Acres** 2,922.59 **Hectares**

SITE SIGNIFICANCE

Biodiversity Significance Rank B2: Very High Biodiversity Significance

Biodiversity Significance Comments

This site supports a good (B ranked) occurrence of Colorado hookless cactus (*Sclerocactus glaucus*), a plant which is globally imperiled (G2G3/S2S3), and an excellent (A-ranked) example of Grand Junction milkvetch (*Astragalus linifolius*), a globally vulnerable (G3Q/S3) plant. The Grand Junction milkvetch is confined to the eastern base of the Uncompahgre Plateau in Mesa, Montrose and Delta counties. There is also a good (B-ranked) occurrence of the globally vulnerable (G3/S3) Fendler cloak-fern (*Argyrochosma fendleri*) and an excellent (A-ranked) occurrence of the state rare (G4/S3) narrowleaf cottonwood / red-osier dogwood riparian forest (*Populus angustifolia* / *Cornus sericea*). Many stands of this association occur in Colorado, but they are highly threatened by improper livestock grazing, development, highway corridors, and stream flow alterations. Although no large, pristine stands remain in Colorado, this stand is one of the few in excellent condition. The state imperiled (G5/S2) canyon tree frog is also found here. The canyon tree frog inhabits rocky canyons along intermittent or permanent streams. This desert frog reaches its northern limits in Southern Colorado. Although primarily terrestrial, it breeds in canyon bottom pools surrounded by rock. It is usually found near permanent pools or cottonwoods in the pinon - juniper zone.

Other Values Rank No Data

Other Values Comments

No Data

LAND MANAGMENT 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

Element State ID	State Scientific Name	State Common Name	Global Rank	State Rank	Driving Site Rank
16984	*Sclerocactus glaucus*	Colorado hookless cactus	G2G3	S2S3	No
20453	*Astragalus linifolius*	Grand Junction milkvetch	G3Q	S3	No
20453	*Astragalus linifolius*	Grand Junction milkvetch	G3Q	S3	No
24809	*Salix monticola* / Mesic Forbs Shrubland	Montane Riparian Willow Carr	G4	S3	No
19160	*Hyla arenicolor*	Canyon Treefrog	G5	S2	No
24860	*Populus angustifolia / Cornus sericea* Woodland	Cottonwood Riparian Forest	G4	S3	No

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16984	*Sclerocactus glaucus*	Colorado hookless cactus	G2G3	S2S3	Yes
24686	*Betula occidentalis / Maianthemum stellatum* Shrubland	Foothills Riparian Shrubland	G4?	S2	No
24773	*Alnus incana / Cornus sericea* Shrubland	Thinleaf Alder-Red-osier Dogwood Riparian Shrubland	G3G4	S3	No
24867	*Picea pungens / Cornus sericea* Woodland	Montane Riparian Forest	G4	S2	No
21454	*Hippochaete variegata*	variegated scouringrush	G5	S1	No
20453	*Astragalus linifolius*	Grand Junction milkvetch	G3Q	S3	No
17626	*Epipactis gigantea*	helleborine	G4	S2S3	No
24362	*Oreocarya longiflora*	long-flower cat's-eye	G3	S3	No
21725	*Falco peregrinus anatum*	American Peregrine Falcon	G4T4	S2B	No
24246	*Argyrochosma fendleri*	Fendler cloak-fern	G3	S3	No

REFERENCES

Reference ID	Full Citation
198627	Lyon, P. and B. Kuhn. 2010. Rare Plant Survey of Dominguez-Escalante National Conservation Area.
169188	Rocchio, Joe. 2001. Colorado Natural Heritage Program Survey of Critical Wetlands of Mesa County.

ADDITIONAL TOPICS

Additional Topics

No Data

VERSION

Version Date 11/18/2010

Version Author Lyon, M.J. and B. Kuhn

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