

Level 4 Potential Conservation Area (PCA) Report

Name Bennett Creek South

Site Code S.USCOHP2*2097

IDENTIFIERS

Site ID 125 Site Class PCA
Site Alias Bennett Creek (Rio Grande Project)

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 375042N
State Colorado Longitude 1070708W

<u>Quad Code</u>	<u>Quad Name</u>
37107-G2	Hermit Lakes
37107-G1	Bristol Head

County

Mineral (CO)

<u>Watershed Code</u>	<u>Watershed Name</u>
13010001	Rio Grande headwaters

SITE DESCRIPTION

Minimum Elevation	9,520.00 Feet	2,902.00 Meters
Maximum Elevation	12,080.00 Feet	3,682.00 Meters

Site Description

Bennett Creek is a first order subalpine to upper montane tributary of the Rio Grande. The upper part begins in a scenic subalpine rolling meadow at the base of alpine scree slopes. The vegetation along the upper portion of the creek is dominated by water sedge (*Carex aquatilis*) and Canada reed grass (*Calamagrostis canadensis*). As it steepens and narrows, planeleaf willow (*Salix planifolia*) with Canada reed grass dominates the riparian vegetation. The adjacent slopes of the upper portion are comprised of Parry oatgrass grassland (*Danthonia parryi*). At approximately 11,000 feet in elevation the creek quickly picks up gradient and has cut a narrow and steep-walled canyon. The riparian vegetation reflects the change in gradient and is dominated by Engelmann spruce (*Picea engelmannii*) and Drummond's willow (*Salix drummondii*), while the slopes are forested with a mosaic of spruce-fir (*Picea engelmannii*-*Abies lasiocarpa*) and aspen (*Populus tremuloides*). At the mouth of the canyon a montane riparian forest of narrowleaf cottonwood (*Populus angustifolia*), thinleaf alder (*Alnus incana*) and Drummond's willow (*Salix drummondii*) dominate. An aqueduct and a two-track dirt road that leads to Santa Maria Reservoir bisect the lower portion of this site.

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 12/10/1998
Designer Rondeau, R.J.

Boundary Justification

Captures stretch of Bennett Creek containing occurrence to potential barrier (aqueduct). Approximately 1,000 foot buffer to stream included. This boundary includes the stretch of Bennett Creek containing the fish occurrence and approximately a 1000 foot buffer, as well as the headwaters necessary to maintain the natural hydrologic regime. The upper elevation of the site includes the grassland occurrence and adjacent suitable habitat. Digital elevation models, the 7.5 minute topographic map, and on-the-ground survey were referenced for delineating boundaries for this site.

Primary Area	995.43 Acres	402.84 Hectares
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SITE SIGNIFICANCE

Biodiversity Significance Rank B3: High Biodiversity Significance

Biodiversity Significance Comments

B ranked occurrence of T3 trout and B ranked occurrence of *Danthonia parryi* grasslands (G3S3). The Bennett Creek site supports the only remaining Mineral County relict population of Rio Grande cutthroat trout (*Oncorhynchus clarki virginalis*) and a small but pristine stand of Parry oat grassland (*Danthonia parryi*). The Bennett Creek site supports the last remaining relict population of Rio Grande cutthroat trout in Mineral County. Although this population is small the genetic purity has been rated an "A" by Division of Wildlife and is considered one of the most important populations to monitor and protect (John Alves, DOW, pers. comm.). Also noteworthy is the small but pristine occurrence of a Parry's oatgrass montane grassland. The Parry's oatgrass occupies the upper meadows of the site. Parry's oatgrass is one of the most palatable native grasses in Colorado ([DeVelice et al. 1986]) and a decreaser with grazing use ([Johnston 1997]). Parry's oatgrass has apparently decreased markedly in area, especially from settlement to World War II; it was already "of scattered occurrence" by the mid-1930's ([Dayton et al. 1937]), but it started showing up more abundantly following reductions in livestock grazing intensity beginning in the 1950's (Johnston 1997). Mineral County supports several examples of the Parry's oatgrass community, of which Bennett Creek is among the best (see Bellows Creeks site for the largest Mineral County occurrence).

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

No Data

Information Needs

Need to verify site boundaries with on-site investigation.

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>
19228	<i>Danthonia parryi</i> Herbaceous Vegetation	Montane Grasslands	G3	S3	Yes
20205	<i>Oncorhynchus clarkii virginalis</i>	Rio Grande Cutthroat Trout	G4T3	S3	Yes

REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
-	No Data

ADDITIONAL TOPICS

Additional Topics

No Data

VERSION

Version Date	12/10/1998
Version Author	Rondeau, R.J.

Disclaimer

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