Level 4 Potential Conservation Area (PCA) Report

Name   Bruno Canyon
Site Code  S.USCOHP*28135

IDENTIFIERS

<table>
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<tr>
<th>Site ID</th>
<th>2699</th>
<th>Site Class</th>
<th>PCA</th>
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<tr>
<td>Site Alias</td>
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Network of Conservation Areas (NCA)

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<th>NCA Site ID</th>
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County
Las Animas (CO)

SITE DESCRIPTION

Site Description
Bruno Canyon is a striking red rock canyon that enters the Purgatoire River just upstream of Chacuaco Canyon. This narrow and restricted canyon is noted for the abundance of red walls and smooth rock slopes. Access into the canyon generally requires rock scrambling unless accessed from the Purgatoire River. The oldest strata (Permian and Triassic age) in southeast Colorado make up the canyon walls and is seldom seen elsewhere in eastern Colorado. Once inside the canyon a suite of riparian trees grow beside the ephemeral creek. Plains cottonwoods (*Populus deltoides*), peach leaf willow (*Salix amygdaloides*) and boxelder maple (*Acer negundo*) are the most common trees. Coyote willow (*Salix exigua*) is common in patches throughout the canyon. Unlike many eastern plains streams, this stream is dominated by a native understory of grasses and forbs due to its limited use by livestock. Common grasses include Indian grass (*Sorghastrum nutans*), switch grass (*Panicum virgatum*), scratchgrass (*Muhlenbergia asperifolia*), and Springfield's beardgrass (*Bothriochloa springfieldii*). Although Bruno Creek is ephemeral, springs are scattered throughout the canyon creating permanent ponds with cattails lining the edges. The vegetation changes frequently throughout the canyon based on floodplain width and depth of soil and proximity to channel, thus making it hard to generalize the overall community type. A few tamarisk were found near the confluence with Purgatoire River. During good precipitation years the Plains leopard frog is abundant in the deeper pools. One pool near the confluence appears to be permanent and was full of small fishes. The landuse by humans is limited due to the difficult access however periodic stray cattle will graze the canyon bottom during the winter months although few cattle signs exist in the canyon.

Key Environmental Factors
Surface and ground water flows are critical to the vegetation and aquatic animal community associated with the creek and canyon bottom. Periodic flash floods are needed for cottonwood regeneration. Groundwater is critical to the maintenance of the numerous seeps and springs found throughout the canyon.

Climate Description
No Data

Land Use History
Periodic livestock grazing occurs but this is predominantly a wild canyon.

Cultural Features
Native American artifacts were present.

Minimum Elevation  4,510.00  Feet  1,374.65  Meters
Maximum Elevation  4,880.00  Feet  1,487.42  Meters

SITE DESIGN

<table>
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<tr>
<th>Site Map</th>
<th>Y - Yes</th>
<th>Mapped Date</th>
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<td>Designer</td>
<td>Rondeau, R.J.</td>
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Boundary Justification
The boundary is drawn to include the canyon bottom, slopes, and rimrock of Bruno Canyon. All known occurrences of rare elements associated with Bruno Canyon were included. The boundary was digitized while referencing a one meter digital color orthophoto quad and a 1:24,000 digital quad.

Primary Area  722.33  Acres  292.32  Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank  B2: Very High Biodiversity Significance
Biodiversity Significance Comments
The site supports an excellent (A-ranked) occurrence of the globally imperiled (G2/S2) Populus deltoides / Panicum virgatum - Schizachyrium scoparium plains cottonwood riparian forest and a good (B-ranked) occurrence of the state rare (G5/S2) plant Lobelia cardinalis.

Other Values Rank No Data

Other Values Comments
This canyon represents one of the highest quality riparian occurrences in eastern Colorado.
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