

Level 4 Potential Conservation Area (PCA) Report

Name Taylor Canyon at San Juan River

Site Code S.USCOHP*105

IDENTIFIERS

Site ID 1146 Site Class PCA
Site Alias Taylor Canyon

Network of Conservation Areas (NCA)

<u>NCA Site ID</u>	<u>NCA Site Code</u>	<u>NCA Site Name</u>
2467	S.USCOHP*27036	Pagosa Springs

LOCATORS

Nation United States Latitude 371226N
State Colorado Longitude 1070213W

Quad Code Quad Name
37107-B1 Oakbrush Hill

County
Archuleta (CO)

Watershed Code Watershed Name
14080101 Upper San Juan

SITE DESCRIPTION

Minimum Elevation	6,880.00 Feet	2,097.00 Meters
Maximum Elevation	7,600.00 Feet	2,316.00 Meters

Site Description

The Taylor Canyon site encompasses two tributaries of the San Juan River, Stinking Springs Canyon and Taylor Canyon. The two join the San Juan River just to the south of the boundary. Soils are derived from Mancos shale. Areas mapped as Dakota sandstone have alluvium of Mancos shale in microsites that support the Pagosa bladderpod. The land is privately owned, within the Southern Ute Reservation, but is accessed by county roads. Vegetation is a mosaic of grasslands, sagebrush (*Artemisia* sp.) and ponderosa pine (*Pinus ponderosa*) forest. San Juan National Forest personnel observed the westernmost occurrence of Pagosa bladderpod in Taylor Canyon in 1996. Approximately 100 individuals were seen in an open area of about five acres. None of the plants were flowering. Associated species included Gambel oak (*Quercus gambelii*), Oregon grape (*Mahonia repens*), ponderosa pine, Indian rice grass (*Oryzopsis hymenoides*) and Rocky Mountain juniper (*Juniperus scopulorum*).

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 03/30/1999

Designer Fayette, K.K.

Boundary Justification

The boundary is drawn to include the occurrences of Pagosa bladderpod, and adjacent suitable habitat to allow for expansion or movement of the populations over time. The boundary is also intended to represent the area needed to protect the prairie dog population and allow for suitable areas into which the population can expand. The boundary includes the grasslands grazed by the cattle, which mimics the historic disturbance processes of fire, and herbivory by bison, natural disturbances that influenced evolution of prairie dogs.

Primary Area 4,409.79 Acres 1,784.59 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B2: Very High Biodiversity Significance

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Biodiversity Significance Comments

The Taylor Canyon site supports a good (B-ranked) and a fair (C-ranked) occurrence of Pagosa bladderpod (*Lesquerella pruinos*), a species that is imperiled (G2/S2) on a global scale. The Pagosa bladderpod is restricted to soils derived from Mancos shale and currently known from 15 occurrences, all within a small area in Archuleta County, Colorado and one occurrence in New Mexico. Habitat destruction is the biggest threat to *L. pruinos*, especially considering its limited range. Residential growth and development around the city of Pagosa Springs could threaten nearby populations of the bladderpod. There are four occurrences of Pagosa phlox, a species that is secure (G4) globally, but vulnerable (S3) in Colorado. The site also contains a good (B-ranked) occurrence of the Gunnison's prairie dog (*Cynomys gunnisoni*), a species that is globally secure (G5/S5). Gunnison's prairie dogs are endemic to the southwestern United States and have a broad distribution within Arizona, Colorado, New Mexico and Utah. Gunnison's prairie dogs are declining throughout their range, although extent of the decline is unknown. Indiscriminate poisoning, habitat conversion, and plague have drastically reduced numbers and range (Miller and Cully 2001, Cully and Williams 2001). Plague is probably the greatest threat at this time. Gunnison's prairie dog is a keystone species upon which many other prairie species depend (Miller and Cully 2001). The Burrowing Owl (*Athene cunicularia*), hawks, and fox and coyote are among those animals that are found in greatest numbers on prairie dog towns.

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

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>
18375	<i>Phlox caryophylla</i>	Pagosa phlox	G4	S3	No
18927	<i>Lesquerella pruinos</i>	Pagosa bladderpod	G2	S2	Yes
18375	<i>Phlox caryophylla</i>	Pagosa phlox	G4	S3	No
21389	<i>Cynomys gunnisoni</i>	Gunnison's Prairie Dog	G5	S5	No
18375	<i>Phlox caryophylla</i>	Pagosa phlox	G4	S3	No
18375	<i>Phlox caryophylla</i>	Pagosa phlox	G4	S3	No
18927	<i>Lesquerella pruinos</i>	Pagosa bladderpod	G2	S2	No
18927	<i>Lesquerella pruinos</i>	Pagosa bladderpod	G2	S2	No

REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
185846	Cully, J. F., Jr., and E. S. Williams. 2001. Interspecific comparisons of sylvatic plague in prairie dogs. <i>Journal of Mammalogy</i> 82:894-905.
167969	Kotliar, N.B., B.W. Baker, A.D. Whicker, G. Plumb. 1999. A critical review of assumptions about the prairie dog as a keystone species. <i>Environmental Management</i> 24:177-192.

ADDITIONAL TOPICS

Additional Topics

No Data

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VERSION

Version Date 02/15/2003

Version Author Lyon, M.J.

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