

# Level 4 Potential Conservation Area (PCA) Report

Name Twin Rocks Road

Site Code S.USCOHP\*28265

## IDENTIFIERS

Site ID 2755 Site Class PCA  
Site Alias None

## 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 385550N  
State Colorado Longitude 1051207W

## Quad Code Quad Name

38105-H2 Divide

## County

Teller (CO)

## Watershed Code Watershed Name

10190001 South Platte Headwaters

## SITE DESCRIPTION

Minimum Elevation	8,850.00 Feet	2,697.48 Meters
Maximum Elevation	9,100.00 Feet	2,773.68 Meters

## Site Description

Twin Rocks Road is a valley site within the lower montane foothills zone in the central region of Teller County. The site encompasses montane grassland at lower elevation relative to the surrounding area. Portions of the site lie along Twin Creek and two of the creeks unnamed tributaries. Habitat of the site is characterized by an intricate mosaic of large open areas of grasslands containing native bunchgrasses and dominated by Arizona fescue - mountain muhly (*Festuca arizonica* - *Muhlenbergia montana*) interlaced with narrow riparian areas dominated by herbaceous vegetation that occur along the watercourses. Uplands surrounding the site include communities of ponderosa pine (*Pinus ponderosa*) woodland. The soils of the site are deep, which is characteristic of the valley grasslands of the region. These deep valley soils provide perfect habitat for Gunnison prairie dogs (*Cynomys gunnisoni*), three colonies of which inhabit the site. This complex of Gunnison's prairie dog occupies portions of the species range located in south-central Colorado and north-central New Mexico that the U. S. Fish and Wildlife Service designated as a candidate population for listing under the Endangered Species Act because threats within this part of the species range are significant and imminent (USFWS 2008). Local hydrology is driven by soil characteristics, precipitation and infiltration. The natural hydrologic regime has been altered in the past by changes to vegetation and soil induced by grazing, which still occurs at the site. Geology is dominated by sandstone formations of multiple ages (Tweto 1979).

## Key Environmental Factors

The presence of the Gunnison prairie dogs at this site is attributable to unfragmented native montane grassland that has experienced only moderate disturbance. Ecological processes including climate, fire disturbance, grazing intensity, and Gunnison prairie dog (*Cynomys gunnisoni*) activity are key determinants of floristic and site characteristics.

## Climate Description

This site at an elevation of approximately 9,000 feet experiences its coldest temperatures in January with an average maximum of 36.5 °F and a minimum of 7.77 °F. Warmest temperatures occur in July with an average maximum of 73.81 °F and an average minimum of 44.26 °F. July and August were the wettest months of the year with 3.33 and 3.41 inches of precipitation respectively. Driest months are December, January and February with 0.39, 0.41 and 0.43 inches of precipitation respectively. March through June and September through November have intermediate amount of precipitation (Western Regional Climate Center 2010).

## Land Use History

No Data

## Cultural Features

No Data

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## SITE DESIGN

Site Map Y - Yes

Mapped Date 01/04/2011

Designer Sovell, J.R.

### Boundary Justification

The boundary encompasses the entire extent of the prairie dog complex, surrounding montane grassland, and the (mostly) unoccupied space among these colonies. The site is bounded on all sides by land that is unsuitable for use by prairie dogs because it is much too hilly and wooded. The boundary also includes unoccupied habitat outside of the edge of the prairie dog complex and is intended to allow for suitable areas into which the population can expand.

Primary Area 469.06 Acres

189.82 Hectares

## SITE SIGNIFICANCE

Biodiversity Significance Rank B4: Moderate Biodiversity Significance

### Biodiversity Significance Comments

This site was drawn for an extant occurrence of the Gunnison's prairie dog (*Cynomys gunnisoni*). This occurrence is within the montane portion of the species population range, which occupies south-central Colorado and north-central New Mexico. The montane population of the Gunnison prairie dog is considered globally imperiled (G5T2) and is designated as a candidate population by the U. S. Fish and Wildlife Service under the Endangered Species Act.

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

Alien plant species are common in areas that have been over-grazed. Alien species include Kentucky bluegrass (*Poa pratensis*), smooth brome (*Bromus inermis*), cheatgrass (*Bromus tectorum*), common timothy (*Phleum pratense*), white clover (*Trifolium repens*), Canada thistle (*Cirsium arvense*).

### Offsite

There is some urban and exurban development within the surrounding landscape and depending upon the density of future developments this could be detrimental to the long term viability of the prairie dog population at this site.

### Information Needs

No Data

## ASSOCIATED ELEMENTS OF BIODIVERSITY

<u>Element</u>			<u>Global Rank</u>	<u>State Rank</u>	<u>Driving Site Rank</u>
<u>State ID</u>	<u>State Scientific Name</u>	<u>State Common Name</u>			
44176	<i>Cynomys gunnisoni</i> pop. 1	Gunnison's Prairie Dog - Montane Population	G5T2	S2	Yes

## REFERENCES

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## Reference ID

## Full Citation

198660	Culver, D.R., D. Malone, and A. Shaw. 2011. CNHP Final Report: Survey of Critical Biological Resources in Teller County, Colorado. Colorado Natural Heritage Program, Fort Collins, CO.
192747	Tweto, O. 1979. Geologic Map of Colorado, 1:500,000. United States Geological Survey, Department of Interior, and Geologic Survey of Colorado, Denver, CO.
198679	U.S. Fish and Wildlife Service (USFWS). 2008. Endangered and Threatened Wildlife and Plants; 12-month Finding on a Petition To List the Gunnison's Prairie Dog as Threatened or Endangered. Federal Register 73(24): 6660-6684.
198676	Western Regional Climate Center (WRCC) (Web Page). Accessed 2010. Division of Atmospheric Sciences, Desert Research Institute. Reno, Nevada. <a href="http://www.wrcc.dri.edu">http://www.wrcc.dri.edu</a>

## ADDITIONAL TOPICS

### Additional Topics

No Data

## VERSION

Version Date 01/04/2011

Version Author Sovell, J.R.

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