

Level 4 Potential Conservation Area (PCA) Report

Name West Fourmile at Fourmile Creek

Site Code S.USCOHP*28214

IDENTIFIERS

Site ID 2734 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 384611N
State Colorado Longitude 1051652W

Quad Code Quad Name
38105-G3 Wrights Reservoir

County
Teller (CO)

Watershed Code Watershed Name
11020002 Upper Arkansas

SITE DESCRIPTION

Minimum Elevation	7,760.00 Feet	2,365.25 Meters
Maximum Elevation	7,960.00 Feet	2,426.21 Meters

Site Description

West Fourmile and Fourmile creeks converge in the middle of the site. They range from Rosgen Class B to C stream channels, which are characterized by downcutting due to headcuts. The creeks are currently creating cutbanks and depositing sediment in equilibrium, maintaining the creeks' sinuosity. Stock ponds are present along the creeks. Beaver are no longer present at the site. Mammals currently inhabiting the area include elk (*Cervus canadensis*), Gunnison's prairie dog (*Cynomys gunnisoni*), coyote (*Canis latrans*) and red fox (*Vulpes vulpes*). Seventeen species of birds were observed, including Mallard (*Anas platyrhynchos*), Common Snipe (*Gallinago gallinago*), and Red-winged Blackbird (*Agelaius phoeniceus*) that are dependent upon waterways. Other water-dependent animals observed include northern leopard frog (*Rana pipiens*), fish, waterstriders, mayflies, and damselflies. Housing developments are under construction, interrupting connectivity, but adjacent BLM lands preserve a corridor of wildlife habitat. The floodplain geology consists of pre-ashflow andesitic lavas, breccias, tuffs, and/or conglomerates. Pikes Peak granite dominates the uplands. Riparian soil consists of silty clay loam. Upland soils include Tolex and Guffey very gravelly sandy loams. Ponderosa pine (*Pinus ponderosa*) woodlands and patches of xeric grasslands occupy surrounding hillslopes. Rock outcrops are occupied by sparse cover of Ponderosa pine (*Pinus ponderosa*), Rocky Mountain juniper (*Juniperus scopulorum*), Douglas-fir (*Pseudotsuga menziesii*), and several shrub species including waxflower (*Jamesia americana*), Gambel oak (*Quercus gambelii*), and whitestem gooseberry (*Ribes inerme*). Herbaceous dry meadows are characterized by mixed graminoids and forbs with a few scattered shrubs. The wide, low gradient river valley is extensively irrigated. Mesic meadows and swales are dominated by domestic agricultural grasses such as timothy (*Phleum pratense*), smooth brome (*Bromus inermis*) and redtop (*Agrostis gigantea*), and weeds like Canada thistle (*Cirsium arvense*). Native species remain in abandoned meander scars with shallow groundwater discharge. Beaked sedge (*Carex utriculata*) herbaceous vegetation dominates most of the riparian zone, but there are also areas of mountain rush (*Juncus balticus*) herbaceous vegetation where the water table fluctuates.

Key Environmental Factors

Pale blue-eyed grass (*Sisyrinchium pallidum*) occurs in meadows with moist to saturated soils. Northern leopard frogs (*Rana pipiens*) live in wet meadows, ponds, and streams (Hammerson 1999).

Climate Description

Teller County is cool and dry although Pikes Peak has the topographic relief to cool humid air and initiate precipitation. Average annual precipitation is 10.5-16.2 inches (<http://www.worldclimate.com>), depending upon exact location within the county. Snowfall is greatest in April and May. Monsoon rains peak in July. Spring and summer therefore have the greatest precipitation, and sunny fall weather dries out the landscape. Teller County has the second highest rate of lightning strikes nationwide, an annual average of 5,700 strikes that reach the ground. (Precipitation timing and lightning information was taken from Teller County 2008). Average maximum temperature is lowest, 30 °F (-1.1 °C), in January, and highest, 75.4 °F (24.1 °C), in July. Average

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minimum temperature is lowest, -2.8 °F (-19.4 °C), in January, and highest, 45.9 °F (7.7 °C) in July
(<http://www.worldclimate.com>).

Land Use History

No Data

Cultural Features

No Data

SITE DESIGN

Site Map Y - Yes

Mapped Date 12/17/2010

Designer Shaw, A.E. and D.G. Malone

Boundary Justification

The boundary is drawn to encompass only the irrigated floodplain that the species of interest depend on directly for habitat. Because the site is irrigated, hydrological connections between the wet meadow and the surrounding uplands are of minimal importance, and the uplands are not included within the site boundary. Only with written permission were private lands visited.

Primary Area 658.41 Acres 266.45 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B4: Moderate Biodiversity Significance

Biodiversity Significance Comments

The site is driven by a poor viability (D-ranked) occurrence (one plant) of the globally imperiled (G2G3/S2) pale blue-eyed grass (*Sisyrinchium pallidum*). During the 2010 survey a Bobolink (*Dolichonyx oryzivorus*) currently watchlisted by CNHP was observed.

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

Introduced plants include Canada thistle (*Cirsium arvense*), yellow sweet clover (*Melilotus officinalis*), common mullein (*Verbascum thapsus*), Russian thistle (*Salsola iberica*), tall tumble-mustard (*Sisymbrium altissimum*), field bindweed (*Convolvulus arvensis*), and jointed goatgrass (*Aegilops cylindrica*).

Offsite

No Data

Information Needs

No Data

ASSOCIATED ELEMENTS OF BIODIVERSITY

<u>Element</u>	<u>State Scientific Name</u>	<u>State Common Name</u>	<u>Global Rank</u>	<u>State Rank</u>	<u>Driving Site Rank</u>
21615	<i>Sisyrinchium pallidum</i>	pale blue-eyed grass	G2G3	S2	No

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.
104501	Hammerson, G. A. 1999. Amphibians and reptiles in Colorado. Second edition. University Press of Colorado, Boulder. xxvi + 484 pp.
198642	Teller County (Web Page). Accessed 2010. 2008 Teller County Multi-Hazard Mitigation Plan. http://www.co.teller.co.us/OEM/tellercopdm_plan.pdf
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.
198640	USDA Natural Resource Conservation Service. 2008. Soil Survey Geographic (SSURGO) Database for Teller-Park Area, Parts of Teller and Park Counties, Colorado. Fort Worth, TX: United States Department of Agriculture, Natural Resource Conservation Service.

ADDITIONAL TOPICS

Additional Topics

No Data

VERSION

Version Date 12/17/2010

Version Author Shaw, A.E. and D.G. Malone

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