

Level 4 Potential Conservation Area (PCA) Report

Name East River at Roaring Judy

Site Code S.USCOHP*23635

IDENTIFIERS

Site ID 412 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 384347N
 State Colorado Longitude 1065118W

Quad Code Quad Name

38106-F7	Almont
38106-G7	Cement Mountain
38106-G8	Crested Butte

County

Gunnison (CO)

Watershed Code Watershed Name

14020001	East-Taylor
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SITE DESCRIPTION

Minimum Elevation	8,000.00	Feet	2,438.00	Meters
Maximum Elevation	8,800.00	Feet	2,682.00	Meters

Site Description

This site occupies a moderate, alluviated mountain valley along the East River. Much of the upstream portion of the site is dotted with houses and agricultural activities. There are numerous structures, roads, and trails associated with the Roaring Judy Fish Hatchery in the area. Surrounding slopes are dominated by sagebrush. Hwy 135 traverses the east side of the site. Up and downstream of the site there are many homes and agricultural fields within the floodplain. The narrowleaf cottonwood/river hawthorn community (*Populus angustifolia*/*Crataegus rivularis*) occurs along the primary floodplain terrace. Incision of the river channel has left many areas of this terrace somewhat "high-n-dry" (due to unstable streambanks). Currently, narrowleaf cottonwood and sandbar willow (*Salix exigua*) are reproducing on point bars. The stream may be stabilizing from past abuses but many streambanks are still unstable and lack adequate vegetation cover. Mature stands of cottonwood and alder (*Alnus incana* ssp. *tenuifolia*) occupy older, secondary floodplain terraces. Much of the secondary floodplain to the west of the river is now dotted with structures/artificial ponds associated with the fish hatchery. Beaver ponds are abundant at the confluence of Roaring Judy Creek and the East River and are dominated by willows and sedges. Many river hawthorn individuals near the river appear to be stressed, possibly due to the lowering water table associated with channel incision. Vegetation structure is diverse but this occurrence seems to have less cottonwood than other examples of this community type. Thus, the tree canopy is less pronounced. The understory consists of a diverse group of shrubs including, shrubby cinquefoil (*Pentaphylloides floribunda*), Woods' rose (*Rosa woodsii*), mountain willow (*Salix monticola*), sandbar willow, Drummond's willow (*S. drummondiana*), Geyer's willow (*S. geyeriana*), alder (*Alnus incana* ssp. *tenuifolia*), gooseberry (*Ribes inerme*), twinberry honeysuckle (*Lonicera involucrata*), river birch (*Betula occidentalis*), and bog birch (*Betula glandulosa* - this is a low elevation occurrence for this species, plus it was almost 2 meters high!). The herbaceous understory consists of many non-native and invasive species such as redtop (*Agrostis gigantea*), Baltic rush (*Juncus balticus*), smooth brome (*Bromus inermis*), timothy (*Phleum pratense*), reed canarygrass (*Phalaris arundinacea*), false Solomon's seal (*Maianthemum stellata*), Canada goldenrod (*Solidago canadensis*), Canada thistle (*Cirsium arvense*), dandelion (*Taraxacum officinale*), white Dutch clover (*Trifolium repens*), red clover (*T. pratense*), and oxeye daisy (*Leucanthemum vulgare*). Past livestock activity, the prevalence of irrigated hay meadows full of non-native pasture grasses, and much ground disturbance associated with buildings and roads in the area are the likely culprits for the dominance of non-native species. The site is within the overall habitat range for the globally critically imperiled Gunnison Sage Grouse (*Centrocercus minimus*). Wet meadows and riparian areas are important habitat for the Gunnison Sage Grouse as they use these areas for brood rearing (Colorado Sage Grouse Working Group 1997). Johnston et al. (2001) state the following: "In the Upper Gunnison River basin most cottonwood stands lack tall or medium shrubs, and have been reduced to cottonwood-Kentucky bluegrass or cottonwood-tree juniper gullies, which have considerably reduced forage, wildlife habitat, and watershed values." Thus, despite the prevalence of

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non-native species, dense and diverse shrub understory at this site add to its biological importance.

Key Environmental Factors

No Data

Climate Description

No Data

Land Use History

No Data

Cultural Features

No Data

SITE DESIGN

Site Map Y - Yes

Mapped Date 12/20/2002

Designer Rocchio, F.J.

Boundary Justification

The boundary includes a portion of the East River and the surrounding watershed. The boundary represents a preliminary estimate of the area needed to maintain local hydrological conditions and incorporate an area that will allow natural hydrological processes such as seasonal flooding, sediment deposition, and new channel formation to maintain viable populations of the elements. The boundaries also provide a small buffer from nearby agriculture fields, roads, and houses where surface runoff may contribute excess nutrients, sediment, and herbicides/pesticides. The site contains areas where old oxbows, sloughs, and ponds could provide a source of recruitment for native wetland and riparian plant species and provide fish habitat. However, it should be noted that the hydrological processes necessary to the riparian area are not fully contained by the site boundaries. Any upstream activities along East River and its tributaries such as water diversions, impoundments, improper livestock grazing, and development could potentially be detrimental to the hydrology of the riparian area. This boundary indicates the minimum area that should be considered for any conservation management plan.

Primary Area 5,508.23 Acres

2,229.11 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B3: High Biodiversity Significance

Biodiversity Significance Comments

High biodiversity significance. This site supports a fair (C-ranked) example of the globally imperiled (G2/S2) narrowleaf cottonwood/river hawthorn community (*Populus angustifolia*/*Crataegus rivularis*) woodland. This type is only known from Colorado on the lower slopes of the San Juan Mountains, in the Gunnison Basin, and along tributaries of the San Miguel River, Colorado. The understory is typically very dense and consists of river hawthorn and other shrub species including red-osier dogwood (*Cornus sericea*) and various tall willow species. Graminoid and forb cover is minimal. This association generally occurs away from the immediate stream bank in moderately wide valleys. It also occurs along dry back channels or ephemeral streams. A fair occurrence of the globally apparently secure (G4) narrowleaf cottonwood/red-osier dogwood woodland (*Populus angustifolia*/*Cornus sericea*) also occurs within the site.

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

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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>			
24823	<i>Populus angustifolia</i> - <i>Picea pungens</i> / <i>Alnus incana</i> Woodland	Montane Riparian Forests	G3	S3	No
24727	<i>Populus angustifolia</i> / <i>Crataegus rivularis</i> Woodland	Narrowleaf Cottonwood Riparian Forests	G2?	S2	Yes
24860	<i>Populus angustifolia</i> / <i>Cornus sericea</i> Woodland	Cottonwood Riparian Forest	G4	S3	No

REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
173839	Rocchio J., G Doyle, and R. Rondeau. 2003. Final Report: Survey of Critical Wetlands and Riparian Areas in Gunnison County, Colorado. Colorado Natural Heritage Program, Fort Collins, CO.
173182	Rocchio, J. 2002. Colorado Natural Heritage Program Field Survey of Critical Wetlands in Gunnison County.

ADDITIONAL TOPICS

Additional Topics

No Data

VERSION

Version Date	12/20/2002
Version Author	Rocchio, F.J.

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