

# Level 4 Potential Conservation Area (PCA) Report

Name Colorado River Radium to Red Dirt Creek

Site Code S.USCOHP3\*2384

## IDENTIFIERS

Site ID 660 Site Class PCA  
 Site Alias Red Dirt Creek at Sheep Mountain  
 Site Alias Red Dirt Creek

## Network of Conservation Areas (NCA)

NCA Site ID	NCA Site Code	NCA Site Name
-		No Data

## LOCATORS

Nation United States Latitude 395212N  
 State Colorado Longitude 1065407W

## Quad Code Quad Name

39106-H7	Blue Hill
39106-G8	Burns South
39106-H6	McCoy
39106-H5	Radium
39106-G6	State Bridge
39106-H8	Burns North
39106-G7	Castle Peak

## County

Grand (CO)  
 Eagle (CO)

## Watershed Code Watershed Name

14010001	Colorado headwaters
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## SITE DESCRIPTION

Minimum Elevation	- Feet	- Meters
Maximum Elevation	- Feet	- Meters

## Site Description

Over 250 miles of the Colorado River is found within the State of Colorado. From the Colorado River's headwaters in Rocky Mountain National Park to its border crossing in Utah, the river drops over 5,000 feet in elevation. The 35 mile stretch from Radium to Red Dirt Creek is in the upper basin of the river. It runs through one of the more quiet and relatively undisturbed sections. Several different riparian communities exist along this stretch which are not represented anywhere else within Colorado. There are no pristine sections along the entire Colorado River, and the section from Radium to Red Dirt Creek is no exception. What this section has to offer is one of the most intact portions of riparian habitat left along the 250 mile Colorado state stretch of river. The tracks of the Denver and Rio Grande Western Railroad follow the Colorado. In addition to the tracks, a dirt road parallels the bed of the canyon next to the river for much of this stretch. The road joins a number of small towns including Radium, Rancho del Rio, Bond, Burns, and Derby Junction. Most of the river runs through Bureau of Land Management property, but a number of private ranches break up the public corridor. Rolling hills and a few steep walls are normal. The stream runs primarily east to west from Radium to Derby Junction and then heads southwest to Red Dirt Creek. Many islands are found within this stretch. These islands may be fairly small and contain only narrowleaf willow (*Salix exigua*) or potentially large with mature cottonwoods and junipers along the middle. At times the floodplain is geologically limited and narrow. These narrow stretches usually are dominated by alder (*Alnus incana*), red osier dogwood (*Cornus sericea*), water birch (*Betula occidentalis*), and junipers. The wider and larger floodplains consist of narrowleaf willow (*Salix exigua*) and cottonwoods. The river between Radium and State Bridge is large and fast-moving but has a fairly low gradient (60'/5 miles). Peak flows currently run 2,500-3,000 CFS, although historic flows before diversions and dams ran twice this. Diversions started in the 1940's. Between Radium and State Bridge the river flows through Red Gorge Canyon and then into a wider valley with fairly large floodplains and islands. Steep slopes support Douglas-fir (*Pseudotsuga menziesii*) and ponderosa pine (*Pinus ponderosa*) on north-facing slopes or juniper and sagebrush on south-facing slopes. Riparian vegetation ranges from junipers to alders to Coyote willow to dogwoods and mesic graminoids such as sedges (*Carex* spp). Fifty percent of the water in Grand County is diverted to the east slope. The result of this to the riparian plant community is the creation of new habitat. Potentially more narrowleaf willow and sedge communities exist today than before diversions. The

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river near Bull Gulch and Jack Flats cuts a spectacular gorge through Vermillion sandstone. The sandstone slopes are steep, terraced and cliffed.

## Key Environmental Factors

Floods?

## Climate Description

No Data

## Land Use History

Diversions and damming began in the 1940's.

## Cultural Features

No Data

## SITE DESIGN

Site Map Y - Yes

Mapped Date 01/15/1995

Designer Rondeau, R.J.

## Boundary Justification

These boundaries include the most intact portion of the Colorado River above Glenwood Springs. It includes all of the rare riparian communities found along the Colorado River in this upper portion.

Primary Area 10,656.74 Acres

4,312.65 Hectares

## SITE SIGNIFICANCE

Biodiversity Significance Rank B3: High Biodiversity Significance

## Biodiversity Significance Comments

This site supports a good (B-ranked) and a fair (C-ranked) occurrence of a plant community which is imperiled (G2G3/S2S3) on global scale, *Populus angustifolia* - *Juniperus scopulorum* woodland. This site also contains multiple globally vulnerable or state rare plant species and plant communities in good (B-ranked) to fair (C-ranked) condition. Current field surveys could elevate this site rank to B2.

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

Exotics, such as Kentucky bluegrass (*Poa pratensis*), are common along much of this stretch of the river.

## Offsite

Hydrological processes originating outside the planning boundary, including water quality, quantity, and timing, must be managed to maintain population and community viability.

## Information Needs

Research into the past should be conducted. It would be of considerable use to know what the riparian vegetation looked like before diversions. Are these rare communities new or dying out?

## 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>
22992	<i>Cornus sericea</i> Shrubland	Foothills Riparian Shrubland	G4Q	S3	No
22992	<i>Cornus sericea</i> Shrubland	Foothills Riparian Shrubland	G4Q	S3	No
18795	<i>Carex utriculata</i> Herbaceous Vegetation	Beaked Sedge Montane Wet Meadows	G5	S4	No
24773	<i>Alnus incana</i> / <i>Cornus sericea</i> Shrubland	Thinleaf Alder-Red-osier Dogwood Riparian Shrubland	G3G4	S3	No
24963	<i>Populus angustifolia</i> - <i>Juniperus scopulorum</i> Woodland	Montane Riparian Forest	G2G3	S2S3	No
24657	<i>Juniperus scopulorum</i> / <i>Cornus sericea</i> Woodland	Riparian Woodland	G4	S2	No

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24773	<i>Alnus incana</i> / <i>Cornus sericea</i> Shrubland	Thinleaf Alder-Red-osier Dogwood Riparian Shrubland	G3G4	S3	No
24659	<i>Salix exigua</i> / Barren Shrubland	Coyote Willow/Bare Ground	G5	S5	No
18795	<i>Carex utriculata</i> Herbaceous Vegetation	Beaked Sedge Montane Wet Meadows	G5	S4	No
24657	<i>Juniperus scopulorum</i> / <i>Cornus sericea</i> Woodland	Riparian Woodland	G4	S2	No
24657	<i>Juniperus scopulorum</i> / <i>Cornus sericea</i> Woodland	Riparian Woodland	G4	S2	No
24659	<i>Salix exigua</i> / Barren Shrubland	Coyote Willow/Bare Ground	G5	S5	No
24773	<i>Alnus incana</i> / <i>Cornus sericea</i> Shrubland	Thinleaf Alder-Red-osier Dogwood Riparian Shrubland	G3G4	S3	No
24963	<i>Populus angustifolia</i> - <i>Juniperus scopulorum</i> Woodland	Montane Riparian Forest	G2G3	S2S3	Yes
24645	<i>Alnus incana</i> / Mesic Forbs Shrubland	Thinleaf Alder/Mesic Forb Riparian Shrubland	G3	S3	No
17439	<i>Shepherdia argentea</i> Shrubland	Foothills Riparian Shrubland	G3G4	S1	No
23569	<i>Nuttallia multicaulis</i>	many-stem stickleaf	G3	S3	No
17439	<i>Shepherdia argentea</i> Shrubland	Foothills Riparian Shrubland	G3G4	S1	No
24773	<i>Alnus incana</i> / <i>Cornus sericea</i> Shrubland	Thinleaf Alder-Red-osier Dogwood Riparian Shrubland	G3G4	S3	No
19662	<i>Penstemon harringtonii</i>	Harrington beardtongue	G3	S3	No
24496	<i>Populus angustifolia</i> / <i>Salix ligulifolia</i> - <i>Shepherdia argentea</i> Woodland	Narrowleaf Cottonwood Riparian Forests	G3	S3	No
24686	<i>Betula occidentalis</i> / <i>Maianthemum stellatum</i> Shrubland	Foothills Riparian Shrubland	G4?	S2	No
23569	<i>Nuttallia multicaulis</i>	many-stem stickleaf	G3	S3	No
24659	<i>Salix exigua</i> / Barren Shrubland	Coyote Willow/Bare Ground	G5	S5	No
22992	<i>Cornus sericea</i> Shrubland	Foothills Riparian Shrubland	G4Q	S3	No

## REFERENCES

Reference ID	Full Citation
-	No Data

## ADDITIONAL TOPICS

### Additional Topics

No Data

## VERSION

Version Date	06/30/2003
Version Author	Bell, J.B.

## Disclaimer

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