

# Level 4 Potential Conservation Area (PCA) Report

Name Deadman Creek-Western Sangres

Site Code S.USCOHP\*10658

## IDENTIFIERS

Site ID 1942 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>
1956	S.USCOHP*5778	Sangre de Cristo

## LOCATORS

Nation United States Latitude 375413N  
State Colorado Longitude 1053625W

## Quad Code Quad Name

37105-H6 Crestone  
37105-H5 Crestone Peak

## County

Saguache (CO)

## Watershed Code Watershed Name

13010003 San Luis

## SITE DESCRIPTION

Minimum Elevation	7,600.00 Feet	2,316.48 Meters
Maximum Elevation	12,300.00 Feet	3,749.04 Meters

## Site Description

The Deadman Creek-Western Sangres site encompasses the Deadman Creek watershed. This creek drains steeply out of the western flank of the Sangre de Cristo Mountains, tumbles out over a large alluvial fan, slowing considerably when it meets the valley floor. Once on the valley floor, the creek bed meanders and becomes braided in places. Historically, it appears to have been a "flashy" stream with consistent high flows in the spring from melting snow. In very wet years, the stream flowed through multiple channels, deposited abundant sediment, and changed courses, building the alluvial fan along the mountain front. Lower on the valley floor, the creek becomes entrenched in places and rarely leaves its banks. This active alluvial plain supports three excellent examples of globally rare deciduous forests. The upper, montane and foothill reaches support the aspen / Rocky Mountain maple (*Populus tremuloides* / *Acer glabrum*) plant association. The foothill, or transition, reaches support the largest known occurrence of the globally rare narrowleaf cottonwood - Rocky Mountain juniper (*Populus angustifolia* - *Juniperus scopulorum*). On the valley floor, where the stream becomes intermittent, a stand of a newly described community, the narrowleaf cottonwood / whiplash willow (*Populus angustifolia* / *Salix lucida* var. *caudata*) plant association occurs. In addition to these unique riparian communities, Deadman Creek also supports a population of Rio Grande cutthroat trout (*Oncorhynchus clarkii virginalis*) and the Canyon bog orchid (*Limnorchis ensifolia*). In a near-by abandoned mine in the foothills is a maternity nursery for the pale lump-nosed bat (*Corynorhinus townsendii pallescens*). The uplands of the steep mountain sides contain an excellent occurrence of Smith whitlow-grass (*Draba smithii*) and mixed mountain shrubland (*Cercocarpus montanus* / *Muhlenbergia montana*). The entire valley and riparian area is nearly roadless and in excellent to moderate condition. The purity rating of the Rio Grande cutthroat trout population is potentially low and at best confusing due to the numerous stockings of Pike's Peak cutthroat trout in the 70's and Snake River cutthroat trout in the 80's and 90's (Harig and Fausch 1996). We also found rainbow trout in the lower section, which are known to hybridize with cutthroats. The land use of this site varies considerably. The Forest Service Research Natural Area in the mountains has difficult access so limited recreation occurs there. The valley floor and foothills portions of the site are part of a cattle ranch. An old and unmaintained trail exists in the montane zone and a two-track road crosses Deadman Creek several times on the valley floor. Cattle grazing is the primary use of the lower part of Deadman Creek. Downstream of the lower boundary for the conservations site, Deadman Creek is diverted into a hay meadow pasture. The site is approximately 3,500 acres in size and ranges in elevation from 7,600 to 12,300 feet (2,315-3,745 meters).

## Key Environmental Factors

No Data

## Climate Description

No Data

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## Land Use History

No Data

## Cultural Features

No Data

### SITE DESIGN

Site Map Y - Yes

Mapped Date 08/05/1999

Designer Rondeau, R.J.

## Boundary Justification

The boundaries drawn encompass most of the Deadman Creek watershed and the bat maternity roost. Because of the imminent threat of ground water pumping, a much larger area should be considered in any management or protection strategy.

Primary Area 3,674.55 Acres

1,487.04 Hectares

### SITE SIGNIFICANCE

Biodiversity Significance Rank B2: Very High Biodiversity Significance

## Biodiversity Significance Comments

The Deadman Creek site supports a good (B-ranked) example of the globally imperiled (G2/S2) Smith whitlow-grass (*Draba smithii*). In addition, it supports the state's exemplary and largest (B-ranked) occurrence known of the globally imperiled (G2G3/S2S3) narrowleaf cottonwood - Rocky Mountain juniper (*Populus angustifolia* - *Juniperus scopulorum*) montane riparian forest, and an excellent (A-ranked) example of the *Populus angustifolia* - *Acer glabrum* montane riparian forest. A fair (C-ranked) occurrence of the globally critically imperiled (G1Q/S1) *Populus angustifolia* / *Salix lucida* var. *caudata* also occurs. A population of the Rio Grande cutthroat trout and a breeding colony of the pale lump-nosed bat add to the importance of this 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

### ASSOCIATED ELEMENTS OF BIODIVERSITY

<u>Element State ID</u>	<u>State Scientific Name</u>	<u>State Common Name</u>	<u>Global Rank</u>	<u>State Rank</u>	<u>Driving Site Rank</u>
20205	<i>Oncorhynchus clarkii virginalis</i>	Rio Grande Cutthroat Trout	G4T3	S3	No
24808	<i>Populus angustifolia</i> / <i>Salix (monticola, drummondiana, lucida)</i> Woodland	Narrowleaf Cottonwood/Mixed Willows Montane Riparian Forest	G3	S3	No
24861	<i>Populus tremuloides</i> / <i>Acer glabrum</i> Forest	Montane Riparian Forests	G2	S2	Yes
40632	<i>Cercocarpus montanus</i> / <i>Muhlenbergia montana</i> Shrubland	Mixed Mountain Shrublands	GU	S2	No
21624	<i>Draba smithii</i>	Smith whitlow-grass	G2	S2	Yes
20205	<i>Oncorhynchus clarkii virginalis</i>	Rio Grande Cutthroat Trout	G4T3	S3	No
24963	<i>Populus angustifolia</i> - <i>Juniperus scopulorum</i> Woodland	Montane Riparian Forest	G2G3	S2S3	Yes
21654	<i>Plecotus townsendii pallescens</i>	Townsend's Big-eared Bat Subsp	G4T4	S2	No
20205	<i>Oncorhynchus clarkii virginalis</i>	Rio Grande Cutthroat Trout	G4T3	S3	No

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## REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
173155	Harig, A. L. and K. D. Fausch. 1996. Compilation of data on Colorado waters containing Rio Grande cutthroat trout. Report to Colorado Division of Wildlife. MOU Project No. 904-906.

## ADDITIONAL TOPICS

### Additional Topics

No Data

## VERSION

<b>Version Date</b>	08/05/1999
<b>Version Author</b>	Rondeau, R.J.

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