

# Level 4 Potential Conservation Area (PCA) Report

Name Big Thompson River

Site Code S.USCOHP\*25032

## IDENTIFIERS

Site ID 2152 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 402940N  
State Colorado Longitude 1051836W

### Quad Code Quad Name

40105-E4	Crystal Mountain
40105-D2	Masonville
40105-D4	Glen Haven
40105-D3	Drake
40105-E2	Horsetooth Reservoir
40105-E3	Buckhorn Mountain

### County

### Watershed Code Watershed Name

10190006 Big Thompson

## SITE DESCRIPTION

<b>Minimum Elevation</b>	5,410.00	<b>Feet</b>	1,648.97	<b>Meters</b>
<b>Maximum Elevation</b>	7,545.00	<b>Feet</b>	2,299.72	<b>Meters</b>

### Site Description

The Big Thompson River flows from west to east in southern Larimer County. This site includes much of the Big Thompson River and Buckhorn Creek, plus the following major tributaries: Bear Gulch, North Fork of the Big Thompson River, and Dry Creek. The floodplain of the Big Thompson River and its tributaries is composed of gravel and silts and is defined by steep cliffs and gentle terraces. Willows, cottonwood galleries, and dense herbaceous cover dominate the riparian communities. Surrounding uplands are generally open grasslands or mountain mahogany shrublands, with ponderosa pine woodlands at higher elevations.

### Key Environmental Factors

The major environmental factors impacting this site are related to the hydrology of the system. These impacts can be seasonal flooding, beaver activity, and natural succession.

### Climate Description

No Data

### Land Use History

No Data

### Cultural Features

No Data

## SITE DESIGN

Site Map P - Partial Mapped Date 06/16/2004  
Designer Schorr, R.A.

### Boundary Justification

This site includes the riparian and upland grassland habitat components used by the Preble's meadow jumping mouse (PMJM). Included within the boundary are dense herbaceous and shrub riparian communities and upland grassland communities free from urban impacts. The site includes the riparian area and a 1,000-foot (300-meter) buffer. Based on telemetry studies and trapping results in other areas where PMJM are found, these boundaries should provide the necessary habitat components for long-term stability of the population found there. It includes all known PMJM captures in this drainage, plus additional habitat upstream and downstream of these capture locations. The buffer distance of 300 meters is intended to be conservative, likely including a greater amount of upland community than most mice will utilize, but sufficient

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in all circumstances to ensure persistence of jumping mice. A more refined boundary for this site would include the 100-year floodplain and an additional 100 meters of adjacent upland habitat. Until these data layers are available for all areas within the site, the present boundary should provide for the persistence of the PMJM in this area. The largeness of this site provides a degree of protection from stochastic and site-specific events that may affect portions of the population.

Primary Area 22,173.63 Acres 8,973.39 Hectares

## SITE SIGNIFICANCE

Biodiversity Significance Rank B3: High Biodiversity Significance

### Biodiversity Significance Comments

This site supports good (B-ranked) to poor (D-ranked) occurrences of the globally imperiled (G5T2/S1) Preble's meadow jumping mouse (PMJM) (*Zapus hudsonius preblei*), a subspecies designated as Threatened under the federal Endangered Species Act and by the Colorado Division of Wildlife. Because the riparian systems appear contiguous and more expansive than in other areas within PMJM's range, and PMJM have been found at various locations along these systems, this site is considered of high biodiversity significance. Much of the area remains unsurveyed and it is probable that PMJM is more widespread and numerous than documented.

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

An improved boundary for this site would be the 100-year floodplain and an additional 100 meters of adjacent upland habitat. Until these data layers are available for all areas within the site, the current boundary of a 300 meter buffer on the riparian areas should provide for the persistence of the Preble's meadow jumping mouse in this area.

## 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>
21289	<i>Zapus hudsonius preblei</i>	Meadow Jumping Mouse Subsp	G5T2	S1	No
21289	<i>Zapus hudsonius preblei</i>	Meadow Jumping Mouse Subsp	G5T2	S1	No
21289	<i>Zapus hudsonius preblei</i>	Meadow Jumping Mouse Subsp	G5T2	S1	No
21289	<i>Zapus hudsonius preblei</i>	Meadow Jumping Mouse Subsp	G5T2	S1	Yes
21289	<i>Zapus hudsonius preblei</i>	Meadow Jumping Mouse Subsp	G5T2	S1	No
21289	<i>Zapus hudsonius preblei</i>	Meadow Jumping Mouse Subsp	G5T2	S1	No

## REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
192692	Doyle, G.A., S.L. Neid and R.J. Rondeau. 2005. Final Report: Survey of Critical Biological Resources, Larimer County, Colorado. Colorado Natural Heritage Program, Fort Collins, CO.

## ADDITIONAL TOPICS

### Additional Topics

No Data

## VERSION

Version Date 06/16/2004

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Version Author Schorr, R.A.

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