

Level 4 Potential Conservation Area (PCA) Report

Name Coal Creek below Rocky Flats

Site Code S.USCOHP*27227

IDENTIFIERS

Site ID 2501 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>
2527	S.USCOHP*27435	Rocky Flats Grasslands

LOCATORS

Nation United States Latitude 395559N
State Colorado Longitude 1051214W

Quad Code Quad Name

39105-H2 Louisville

County

Watershed Code Watershed Name

10190005 St. Vrain

SITE DESCRIPTION

Minimum Elevation	5,500.00 Feet	1,676.40 Meters
Maximum Elevation	6,050.00 Feet	1,844.04 Meters

Site Description

This site is located in southeastern Boulder County, immediately north of the boundary with Jefferson County, southwest of the town of Superior. Coal Creek originates in the southwestern corner of Boulder County, near the town of Wondervu. It makes a southward loop into Jefferson County, emerging onto the Rocky Flats terrace, and then turning north to re-enter Boulder County at the northern edge of Rocky Flats. In southern Boulder County, Coal Creek runs through open grasslands below mesas. Historically, the floodplain was likely somewhat wide and meandering, but is now entrenched within low terraces. The creek itself is only 10-20 ft. (3-6 m) across. Water levels are probably never very high in this creek, because there are numerous diversions along the creek. The riparian vegetation is between 164-410 ft. (50-125 m) across, including low shrubs on terraces above the creek. These vegetated terraces may be remnants of when the floodplain was wider, or they may be able to access groundwater recharging from the stream. Within the site, Coal Creek contains a long, continuous stretch of foothills riparian vegetation extending from near the Boulder/Jefferson county line downstream to the town of Superior. The riparian vegetation includes a continuous overstory of mature and regenerating cottonwood trees over dense tall shrubs. Both plains cottonwood (*Populus deltoides*) and narrowleaf cottonwood (*Populus angustifolia*) contribute to the cottonwood overstory, and though the association name is *Populus angustifolia* / *Salix irrorata* woodland, this occurrence contains higher cover of plains cottonwood than narrowleaf cottonwood since it is located at a lower elevation than most occurrences. Dominant shrubs within the riparian channel include bluestem willow (*Salix irrorata*) and narrowleaf willow (*Salix exigua*), though upper terraces contain more cerro hawthorn (*Crataegus erythropoda*) and American plum (*Prunus americana*). Yellow hawthorn (*Crataegus chrysocarpa*) has been documented here as well. The surrounding dry grasslands are strongly dominated by non-native species.

Key Environmental Factors

No Data

Climate Description

No Data

Land Use History

Historic land use includes grazing, gravel mining, and water diversions.

Cultural Features

No Data

SITE DESIGN

Site Map Y - Yes Mapped Date 06/03/2008
Designer Decker, K.L. and J.M. Lemly

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Boundary Justification

The boundary includes the occurrences and a buffer against direct disturbance. The natural processes are not completely contained within the boundary, and off-site activities within the larger watershed have the potential to impact the elements of biodiversity present in the area.

Primary Area 1,504.47 Acres 608.84 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B3: High Biodiversity Significance

Biodiversity Significance Comments

This site supports a fair (C-ranked) occurrence of a globally imperiled (G2/S2) *Populus angustifolia* / *Salix irrorata* riparian woodland, two occurrences of the federally Threatened and globally imperiled (G5T2/S1) Preble's meadow jumping mouse (*Zapus hudsonius preblei*) in fair condition, and a fair to poor (CD-ranked) occurrence of the state imperiled (G5/S1B) Bald Eagle (*Haliaeetus leucocephalus*). Additionally, Boulder County has documented Ferruginous Hawk (*Buteo regalis*) nests and an occurrence of the state rare plant (G5/S2S3) fragrant indigobush (*Amorpha nana*), but these are not in the CNHP database at this time.

Other Values Rank No Data

Other Values Comments

No Data

LAND MANAGEMENT ISSUES

Land Use Comments

Cattle grazed the area for decades and likely grazed right into the riparian corridor. In addition, there were gravel mining operations in the floodplain.

Natural Hazard Comments

No Data

Exotics Comments

The upland grasslands are strongly dominated by non-native hay grasses and invasive weeds e.g., Kentucky bluegrass (*Poa pratensis*), timothy (*Phleum pratense*), orchard grass (*Dactylis glomerata*), cheatgrass (*Anisantha tectorum*), jointed goatgrass (*Aegilops cylindrical*) and smooth brome (*Bromus inermis*), as well as the following non-native forbs: Canada thistle (*Cirsium arvense*), bouncing bet (*Saponaria officinalis*), and bull thistle (*Cirsium vulgare*), chicory (*Cichorium intybus*), common mullein (*Verbascum thaspus*), common teasel (*Dipsacus fullonum*), cut-leaved teasel (*Dipsacus laciniatus*), diffuse knapweed (*Centaurea diffusa*), musk thistle (*Carduus nutans*), poison hemlock (*Conium maculatum*), Russian olive (*Elaeagnus angustifolia*), Scotch thistle (*Onopordum acanthium*), and sulphur cinquefoil (*Potentilla recta*).

Offsite

No Data

Information Needs

No Data

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>
24827	<i>Populus angustifolia</i> / <i>Salix irrorata</i> Woodland	Foothills Riparian Woodland	G2	S2	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
21249	<i>Haliaeetus leucocephalus</i>	Bald Eagle	G5	S1B,S3N	No

REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
195190	Neid, S., J. Lemly, K. Decker and D. Culver. 2009. Final Report: Survey of Critical Biological Resources in Boulder County 2007-2008. Colorado Natural Heritage Program, Fort Collins, CO.

ADDITIONAL TOPICS

Additional Topics

No Data

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VERSION

Version Date 06/03/2008

Version Author Decker, K.L. and J.M. Lemly

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