

Level 4 Potential Conservation Area (PCA) Report

Name South Boulder Creek

Site Code S.USCOHP*1706

IDENTIFIERS

Site ID 1805 Site Class PCA
Site Alias Colorado Tallgrass Prairie

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 395835N
State Colorado Longitude 1051312W

Quad Code Quad Name

39105-H2	Louisville
40105-A2	Niwot
39105-H3	Eldorado Springs

County

Boulder (CO)

Watershed Code Watershed Name

10190005	St. Vrain
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SITE DESCRIPTION

Minimum Elevation	5,265.00	Feet	1,604.77	Meters
Maximum Elevation	5,680.00	Feet	1,731.26	Meters

Site Description

This site encompasses the floodplain of South Boulder Creek and Davidson Mesa, an outwash feature. It occurs narrowly to the west of Highway 93 and widens east of the highway. Bedrock geology is a mosaic of Pierre shale and modern alluvium like Piney Creek and Post-Piney Creek. As is common in floodplains along the foothills there are series of low terraces of the differing alluvium. Vegetation along the creek is dominated by cottonwoods (*Populus deltoides*) and crack willow (*Salix fragilis*). Shrub development is variable; there are dense copses of coyote willow (*Salix exigua*), alder (*Alnus incana*), hawthorn (*Crataegus* spp.), and vines like river grape (*Vitis riparia*). Wet and mesic meadow vegetation occurs within the floodplain. Tallgrasses like big bluestem (*Andropogon gerardii*), Indian grass (*Sorghastrum nutans*), switchgrass (*Panicum virgatum*), prairie cordgrass (*Spartina pectinata*) are common forming dense stands. Beaked spikerush (*Eleocharis rostellata*) is also present and unusual in this landscape setting. Mesic forbs are likewise common and abundant. Unique forbs in this area include great blue lobelia (*Lobelia siphilitica*), winged lythrum (*Lythrum alatum*), and slender false foxglove (*Agalinis tenuifolia*). Irrigated hay fields support an extensive bobolink (*Dolichonyx oryzivorus*) community. Floodplain pools are northern leopard frog (*Rana pipiens*) habitat. This floodplain supports federally listed species including Preble's meadow jumping mouse (*Zapus hudsonius preblei*) and Ute ladies' tresses (*Spiranthes diluvialis*). It also has populations of eastern relictual species like American groundnut (*Apios americana*) and toothcup (*Rotala ramosior*). Davidson Mesa supports prairie relict species like dwarf indigo (*Amorpha nana*) and tall grass grasslands. It also has a prairie dog (*Cynomys ludoviciana*) colony with burrowing owl (*Athene cunicularia*), and an occurrence of the forktip three-awn grass (*Aristida basiramea*). The western portion of the site supports part of a narrow-leaved milkweed (*Asclepias stenophylla*) occurrence. There is a significant amount of Russian olive (*Elaeagnus angustifolia*) and other noxious and exotic weeds in area.

Key Environmental Factors

Floodplain, Quaternary alluvium

Climate Description

No Data

Land Use History

No Data

Cultural Features

No Data

SITE DESIGN

Site Map P - Partial Mapped Date 10/31/2008

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Designer Neid, S.L.

Boundary Justification

The boundary is drawn to include all occurrences within the area and all adjacent habitat. The area is dissected by US 36 and Colorado 93. Note that upstream areas are important to the long term viability of this site through the management of hydrological processes.

Primary Area 3,464.17 Acres 1,401.90 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B2: Very High Biodiversity Significance

Biodiversity Significance Comments

Biodiversity rank is based on an excellent to good (AB-ranked) occurrence of the globally imperiled (G2/S2) Ute ladies' tresses (*Spiranthes diluvialis*) and its 16 sub occurrences, and a good (B-ranked) occurrence of the globally imperiled (G2?/S2) xeric tallgrass prairie (*Andropogon gerardii* - *Schizachyrium scoparium*). The site also supports a fair (C-ranked) occurrence of the globally imperiled (G2/S1S2) mesic tallgrass prairie (*Andropogon gerardii* - *Sorghastrum nutans*), a good to fair (BC-ranked) occurrence of the globally vulnerable (G3?/S3) prairie slough grass (*Spartina pectinata*), and several good to fair (B or C-ranked) occurrences of the state rare (G5/S1) American groundnut (*Apios americana*).

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

Element <u>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>
21289	<i>Zapus hudsonius preblei</i>	Meadow Jumping Mouse Subsp	G5T2	S1	No
23563	<i>Apios americana</i>	American groundnut	G5	S1	No
23563	<i>Apios americana</i>	American groundnut	G5	S1	No
23563	<i>Apios americana</i>	American groundnut	G5	S1	No
17998	<i>Spiranthes diluvialis</i>	Ute ladies' tresses	G2G3	S2	Yes
24811	<i>Andropogon gerardii</i> - <i>Sorghastrum nutans</i> Western Great Plains Herbaceous Vegetation	Mesic Tallgrass Prairie	G2	S1S2	No
23563	<i>Apios americana</i>	American groundnut	G5	S1	No
23563	<i>Apios americana</i>	American groundnut	G5	S1	No
23563	<i>Apios americana</i>	American groundnut	G5	S1	No
16738	<i>Spartina pectinata</i> Western Herbaceous Vegetation	Prairie Slough Grass	G3?	S3	No
24870	<i>Andropogon gerardii</i> - <i>Schizachyrium scoparium</i> Western Great Plains Herbaceous Vegetation	Xeric Tallgrass Prairie	G2?	S2	Yes
23792	<i>Aristida basiramea</i>	fortkip three-awn	G5	S1	No
17998	<i>Spiranthes diluvialis</i>	Ute ladies' tresses	G2G3	S2	No
17998	<i>Spiranthes diluvialis</i>	Ute ladies' tresses	G2G3	S2	No
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REFERENCES

Reference ID	Full Citation
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

Original site design by Pague, C.A. 1994-09-12.

VERSION

Version Date	09/12/1994
Version Author	Pague, C.A.

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