

Level 4 Potential Conservation Area (PCA) Report

Name Boxelder Creek Headwaters

Site Code S.USCOHP*25351

IDENTIFIERS

Site ID 2184 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 405811N
State Colorado Longitude 1051352W

<u>Quad Code</u>	<u>Quad Name</u>
40105-H2	Table Mountain
40105-H3	Virginia Dale

County

<u>Watershed Code</u>	<u>Watershed Name</u>
10190007	Cache La Poudre

SITE DESCRIPTION

Minimum Elevation	6,350.00 Feet	1,935.48 Meters
Maximum Elevation	7,200.00 Feet	2,194.56 Meters

Site Description

The site contains the upper watershed and two foothills canyons carved into a sandstone hogback by Boxelder and Sand Creeks in northern Larimer County. Sand Creek and Boxelder Creek, perennial streams, have incised deep canyons through the Fountain and Ingleside formation sandstones that forms the hogback. The streams turn into broad, gravel washes once out of their respective canyons, and they converge just south of Table Mountain, an isolated butte covered by a mosaic of mountain mahogany (*Cercocarpus montanus*) shrublands and midgrass grasslands. Within the canyons, cottonwoods (especially narrowleaf cottonwood, *Populus angustifolia*) and willows (*Salix* spp.) create a multi-layered structure of trees and shrubs over a diverse, mesic herbaceous layer adjacent to the perennial stream channels. Flood debris a ways from the stream channel includes large logs, indicating intense flooding episodes occur through the canyons. The steep canyon walls have dense stands of Douglas-fir (*Pseudotsuga menziesii*) on the north-facing slopes and mountain mahogany shrublands dominant on the south-facing sides.

Key Environmental Factors

The narrowleaf cottonwood/bluestem willow (*Populus angustifolia*/*Salix irrorata*) woodland in Boxelder Creek is considered to be an early-seral community following the establishment of narrowleaf cottonwood. The dense cover of bluestem and other willows indicates frequent flooding. The narrowleaf cottonwood/chokecherry (*Populus angustifolia*/*Prunus virginiana*) woodland along Sand Creek is considered a late-seral community. These natural communities are maintained by regular flooding.

Climate Description

The site exists within a rain shadow of the Rocky Mountains. As with much of the western Great Plains, rainfall is sparse and drought common. Winters are cold with sporadic precipitation. Fall and spring snows may be big with a resulting soaking of the ground at melt. Summer is generally warm and dry with the exception of significant thunderstorms. Hail is not infrequent. Summer nights are cool with a subsequent short growing season.

Land Use History

No Data

Cultural Features

No Data

SITE DESIGN

Site Map Y - Yes Mapped Date 01/25/2005
Designer Neid, S.L.

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Boundary Justification

The site includes the sandstone hogback between two primary drainage channels (Sand and Boxelder creeks) flowing through incised canyons, both of which have element occurrences. The site includes area upstream from the riparian woodlands as delineated by the Boxelder Creek Headwaters subwatershed (Colorado HUC 12 datalayer) to draw attention to potential upstream impacts to water quality.

Primary Area 9,268.14 Acres 3,750.70 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B2: Very High Biodiversity Significance

Biodiversity Significance Comments

This site includes a good (B-ranked) occurrence of a globally imperiled (G2/S2) riparian woodland, narrowleaf cottonwood/bluestem willow (*Populus angustifolia*/*Salix irrorata*) woodland along Boxelder Creek and a good occurrence of a globally imperiled and state critically imperiled (G2Q/S1) riparian woodland, narrowleaf cottonwood/chokecherry (*Populus angustifolia*/*Prunus virginiana*) woodland that occurs in Haygood Canyon of Sand Creek.

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

Invasive weeds, like Canada thistle (*Cirsium canadensis*) and smooth brome (*Bromus inermis*) occur within the canyons. Control or eradication of these weeds would improve the condition of the riparian vegetation.

Offsite

No Data

Information Needs

No Data

ASSOCIATED ELEMENTS OF BIODIVERSITY

<u>Element</u>			<u>Global Rank</u>	<u>State Rank</u>	<u>Driving Site Rank</u>
<u>State ID</u>	<u>State Scientific Name</u>	<u>State Common Name</u>			
24827	<i>Populus angustifolia</i> / <i>Salix irrorata</i> Woodland	Foothills Riparian Woodland	G2	S2	Yes
24941	<i>Populus angustifolia</i> / <i>Prunus virginiana</i> Woodland	Narrowleaf Cottonwood/Common Chokecherry	G2Q	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 01/25/2005

Version Author Neid, S.L.

Disclaimer

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