

Level 4 Potential Conservation Area (PCA) Report

Name Weminuche Creek

Site Code S.USCOHP*1614

IDENTIFIERS

Site ID 1789 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 372417N
State Colorado Longitude 1071301W

Quad Code Quad Name
37107-D2 Oakbrush Ridge

County
Archuleta (CO)

Watershed Code Watershed Name
14080102 Piedra

SITE DESCRIPTION

Minimum Elevation	7,360.00 Feet	2,243.33 Meters
Maximum Elevation	8,000.00 Feet	2,438.00 Meters

Site Description

The Weminuche Creek site encompasses canyon bottomlands, alluvial floodplains and some of the upland areas of the canyon slopes along parts of a number of waterways. Portions of the Piedra and the East Fork of the Piedra River, and Weminuche, Williams and O'Neal Creeks are all included within the site. The riparian areas contain mixed forest that includes a 40% overstory of blue spruce (*Picea pungens*) and narrowleaf cottonwood (*Populus angustifolia*) with a 20% cover of shrubs including sandbar willow (*Salix exigua*) and thinleaf alder (*Alnus incana*). There is a dense herbaceous groundcover with dominant species including sedges (*Carex* spp.), creeping bentgrass (*Agrostis stolonifera*), bluejoint grass (*Calamagrostis canadensis*) and cow parsnip (*Heracleum maximum*). Non-native Kentucky bluegrass (*Poa pratensis*) is also present. Upland areas include ponderosa pine (*Pinus ponderosa*) with an understory of Arizona fescue (*Festuca arizonica*) and mountain muhly (*Muhlenbergia montana*). A number of rare plant communities occur within the site including blue spruce - thinleaf alder (*Picea pungens* - *Alnus incana*) riparian forest, Arizona fescue - mountain muhly (*Festuca arizonica* - *Muhlenbergia montana*) montane grassland and ponderosa pine / Arizona fescue (*Pinus ponderosa* / *Festuca arizonica*) lower montane forest.

Key Environmental Factors

No Data

Climate Description

No Data

Land Use History

No Data

Cultural Features

No Data

SITE DESIGN

Site Map Y - Yes Mapped Date 11/30/2005

Designer Freeman, K.M. and M.A. March

Boundary Justification

The boundary encompasses the riparian and upland element occurrences. Also included within the boundary is a 1,000 foot buffer. Eliminating disturbance within this buffer would assist in maintaining the integrity of the occurrence, and the integrity of the avian, macroinvertebrate and periphyton communities (Noel et al. 1986, Spackman and Hughes 1995) associated with the riparian forest. Maintenance of this buffer would also aid in reducing impacts from sedimentation (Karr and Schlosser 1978) resulting from increased erosion, which occurs in areas where streamside vegetation is removed or degraded.

Primary Area	1,623.67 Acres	657.08 Hectares
--------------	----------------	-----------------

Level 4 Potential Conservation Area (PCA) Report

Name Weminuche Creek

Site Code S.USCOHP*1614

SITE SIGNIFICANCE

Biodiversity Significance Rank B3: High Biodiversity Significance

Biodiversity Significance Comments

The Weminuche Creek site includes a number of rare plant communities including a good (B-ranked) occurrence of the globally vulnerable (G3/S3) blue spruce / thinleaf alder (*Picea pungens* / *Alnus incana*) montane riparian forest. This association is known from Wyoming to New Mexico. Fewer than 100 stands exist in Colorado, and very few of these are in pristine condition. This association is threatened by development, road building and maintenance, heavy recreational use, improper livestock grazing, and stream flow alterations. The blue spruce/thinleaf alder montane riparian forest occurs in deep, shaded canyons and narrow valleys along relatively straight stream reaches. It generally forms small patches, but can be continuous for several river miles. The site also contains an unranked (E) occurrence of another globally vulnerable (G3/S2) community, the Arizona fescue - mountain muhly (*Festuca arizonica* - *Muhlenbergia montana*) montane grassland and a good (B-ranked) occurrence of ponderosa pine / Arizona fescue (*Pinus ponderosa* / *Festuca arizonica*) lower montane forest a community that is globally unranked (GU) because information is lacking on the extent of its distribution.

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

The boundary for the "Piedra Area ", a congressionally designated Area to be managed for its presently existing wilderness character, and its potential for inclusion in the National Wilderness Preservation System (US Public Law 103-77 1993), begins just to the west of the site. The Weminuche Creek site occurs just outside the boundary for the Piedra Area. The Piedra Area is managed similarly to Wilderness such that livestock grazing is permitted, but motorized vehicles and bicycles are not allowed. It is different than Wilderness in that chainsaw use is permitted.

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>
24518	<i>Picea pungens</i> / <i>Alnus incana</i> Woodland	Montane Riparian Forests	G3	S3	Yes
24543	<i>Festuca arizonica</i> - <i>Muhlenbergia montana</i> Herbaceous Vegetation	Montane Grasslands	G3	S2	No
19228	<i>Danthonia parryi</i> Herbaceous Vegetation	Montane Grasslands	G3	S3	No

REFERENCES

Level 4 Potential Conservation Area (PCA) Report

Name Weminuche Creek

Site Code S.USCOHP*1614

Reference ID

Full Citation

172713	Baker, W.L. 1986. Field Survey to Western Colorado of May 15- August 15, 1986.
172808	J. R. Karr and I. J. Schlosser. 1978. Water resources and the land-water interface. Science 201: 229-234.
165959	Noel, D.S., C.W. Martin and C.A. Federer. 1986. Effects of Forest Clearcutting in New England on Stream Macroinvertebrates and Periphyton. Environmental Management 10: 661-670.
193472	Sovell, J., P. Lyon, and L. Grunau. 2003. Final Report: Upper San Juan Biological Assessment. Colorado Natural Heritage Program, Fort Collins, CO.
159511	Spackman, S. C. and J. W. Hughes. 1995. Assessment of Minimum Stream Corridor Width for Biological Conservation: Species Richness and Distribution Along Mid-Order Streams in Vermont, USA. Biological Conservation 71:325-332.
193559	U.S. Public Law 103-77. 103rd Congress, 1st session, 05 January 1993. Colorado Wilderness Act of 1993. << http://www.wilderness.net/NWPS/documents/publiclaws/103-77.pdf >>. Accessed 9 Nov 2005.

ADDITIONAL TOPICS

Additional Topics

Original site design by Kettler, S.M. 1997-05-22.

VERSION

Version Date 11/30/2005

Version Author Freeman, K.M. and M.A. March

Disclaimer

These data are a product and property of Colorado State University, Colorado Natural Heritage Program (CNHP). These data are strictly "on loan" and should be considered "works in progress". Data maintained in the Colorado Natural Heritage Program database are an integral part of ongoing research at CSU and reflect the observations of many scientists, institutions and our current state of knowledge. These data are acquired from various sources, with varying levels of accuracy, and are continually being updated and revised. Many areas have never been surveyed and the absence of data in any particular geographic area does not necessarily mean that species or ecological communities of concern are not present. These data should not be regarded as a substitute for on-site surveys required for environmental assessments. Absence of evidence is NOT evidence of absence. Absence of any data does not mean that other resources of special concern do not occur, but rather CNHP files do not currently contain information to document this presence. CNHP is not responsible for whether other, non-CNHP data providers have secured landowner permission for data collected.

These data are provided for non-commercial purposes only. Under no circumstances are data to be distributed in any fashion to outside parties. To ensure accurate application of data, tabular and narrative components must be evaluated in conjunction with spatial components. Failure to do so constitutes a misuse of the data. The Colorado Natural Heritage Program shall have no liability or responsibility to the data users, or any other person or entity with respect to liability, loss, or damage caused or alleged to be caused directly or indirectly by the data, including but not limited to any interruption of service, loss of business, anticipatory profits or indirect, special, or consequential damages resulting from the use of operation of the data. Data users hereby agree to hold CNHP, Colorado State University, and the State of Colorado harmless from any claim, demand, cause of action, loss, damage or expense from or related to data users use of or reliance on the data, regardless of the cause or nature thereof, and even in the event that such cause is attributable to the negligence or misconduct of CNHP.

These data are provided on an as-is basis, as-available basis without warranties of any kind, expressed or implied, INCLUDING (BUT NOT LIMITED TO) WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT. Although CNHP maintains high standards of data quality control, CNHP, Colorado State University, and the State of Colorado further expressly disclaim any warranty that the data are error-free or current as of the date supplied