

Level 4 Potential Conservation Area (PCA) Report

Name Death Valley Creek

Site Code S.USCOHP*9328

IDENTIFIERS

Site ID 227 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 371854N
State Colorado Longitude 1072230W

<u>Quad Code</u>	<u>Quad Name</u>
37107-C3	Devil Mountain
37107-C4	Baldy Mountain

County

Archuleta (CO)

<u>Watershed Code</u>	<u>Watershed Name</u>
14080102	Piedra

SITE DESCRIPTION

Minimum Elevation	7,480.00	Feet	2,280.00	Meters
Maximum Elevation	8,000.00	Feet	2,438.00	Meters

Site Description

The Death Valley site lies within a narrow steeply banked valley cut by Death Valley Creek, a tributary of Sheep Creek. The creek originates in a meadow system that has been heavily logged. Some areas along the steep sides of the valley with up to a 60% slope are eroded with less vegetation, while other areas are rocky and contain large boulders. Death Valley Creek is a small intermittent creek with several yet smaller creeks and drainages flowing into it from both sides of the valley. Hydrological processes appear to be intact and seasonal flooding appears to occur in the area. The area is forested with box elder (*Acer negundo*) and blue spruce (*Picea pungens*) dominating the overstory; mountain maple (*Acer glabrum*), dogwood (*Cornus sericea*) and alder (*Alnus incana*) are also present. A dense understory of mesic forbs covers the ground. A Box elder/Red-oiser Dogwood (*Acer negundo*/*Cornus sericea*) Montane Riparian Deciduous Forest occurs along the creek.

Key Environmental Factors

No Data

Climate Description

No Data

Land Use History

No Data

Cultural Features

No Data

SITE DESIGN

Site Map P - Partial Mapped Date 05/23/1997
Designer Kettler, S.M.

Boundary Justification

The boundary encompasses the occurrence and an approximate 1,000 foot buffer that was drawn to ensure all or most of the small drainages would continue to supply the hydrological input to the creek necessary to maintain the natural water quality. This is vital to maintaining viability of the riparian montane forest. This boundary should protect the occurrence from direct disturbance, and is thought to protect the avian, macroinvertebrate and periphyton communities and limit impacts from sedimentation (see Noel et al. 1986, Spackman and Hughes 1995, Karr and Schlosser 1978). The boundary was not intended to capture the entire upstream watershed, although consideration of these areas is important to ensure adequate hydrological processes continue to act in the watershed and maintain the health of the riparian system.

Primary Area	121.38	Acres	49.12	Hectares
---------------------	--------	--------------	-------	-----------------

Level 4 Potential Conservation Area (PCA) Report

Name Death Valley Creek

Site Code S.USCOHP*9328

SITE SIGNIFICANCE

Biodiversity Significance Rank B3: High Biodiversity Significance

Biodiversity Significance Comments

The Death Valley Creek site is drawn for a good (B-ranked) occurrence of a Box elder/Red-osiser dogwood (*Acer negundo*/*Cornus sericea*), Montane Riparian Deciduous Forest, a globally vulnerable (G3?/S2) plant community. This plant association is known from lower montane canyons in Utah and western Colorado. As of 1997, there are less than fifty known global occurrences while there are less than ten stands known in Colorado.

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

Hydrological processes originating outside of the planning boundary, including water quality, quantity, timing and flow must be managed to maintain site viability.

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>
24831	<i>Acer negundo</i> / <i>Cornus sericea</i> Forest	Montane Riparian Deciduous Forest	G3?	S2	Yes

REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
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.
170844	Randolph, D., Smith, Kettler, Redders, Roy, and Aitken. 1994. San Juan National Forest Riparian Site Survey.
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.

ADDITIONAL TOPICS

Additional Topics

No Data

VERSION

Version Date 05/23/1997

Version Author Kettler, S.M.

Disclaimer

Level 4 Potential Conservation Area (PCA) Report

Name Death Valley Creek

Site Code S.USCOHP*9328

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