

Data Dictionary for Potential Conservation Area Transcription Reports from the Colorado Natural Heritage Program

This Data Dictionary defines terms used in Potential Conservation Area (PCA) Reports exported by the Colorado Natural Heritage Program (CNHP) from our Biodiversity Tracking and Conservation System (BIOTICS) database.

Introduction to Potential Conservation Areas

In order to successfully protect populations or occurrences, it is necessary to delineate conservation areas. These potential conservation areas focus on capturing the ecological processes that are necessary to support the continued existence of a particular element of natural heritage significance. Potential conservation areas may include a single occurrence of a rare element or a suite of rare elements or significant features.

The goal of the process is to identify a land area that can provide the habitat and ecological processes upon which a particular element or suite of elements depends for their continued existence. The best available knowledge of each species' life history is used in conjunction with information about topographic, geomorphic, and hydrologic features, vegetative cover, as well as current and potential land uses. The proposed boundary does not automatically exclude all activity. It is hypothesized that some activities will cause degradation to the element or the process on which they depend, while others will not. Consideration of specific activities or land use changes proposed within or adjacent to the preliminary conservation planning boundary should be carefully considered and evaluated for their consequences to the element on which the conservation unit is based.

Element Occurrence

An Element Occurrence (EO) is defined as a specific example of an Element at a geographic location characterized by a habitat capable of sustaining or contributing to the survival of the species, or by a landscape that supports the ecological integrity of the community.

Element

A biodiversity unit of conservation attention and action for which a Heritage Conservation Status Rank is assigned.

Elements may be recognized at any taxonomic level (although typically are only recognized at the species level and below for organisms, and the Ecological System, Alliance, and Association levels for communities).

Elements may also be recognized for biodiversity units for which there is no systematic hierarchy (e.g., animal assemblages, community Complexes).

Elements may be native or exotic at a particular location and collectively represent the full array of biological and ecological diversity for the geographic area covered. Elements may serve as the targets of Heritage inventory. Typically, these targets include native, regularly occurring vulnerable species (including infraspecific taxa and populations) and exemplary ecological communities.

REPORT HEADER

Name

The official CNHP site name, usually corresponding to a local place name or nearby geographic feature.

Site Code

Unique identifier previously used in the BCD for a site record.

IDENTIFIERS

Site ID

Unique identifier for a site.

Site Class

Value that indicates whether a site is a Potential Conservation Area (PCA) or Network of Conservation Areas (NCA).

Domain values for Site Class are:

PCA

NCA

Site Alias

Other names commonly associated with the PCA. These can include informal names, old site names, names used by other offices or cooperating organizations, or the original survey site name.

Network of Conservation Areas (NCA)

A Network of Conservation Areas (NCA) will fit one of the following definitions:

A. A landscape area that encompasses Potential Conservation Areas (PCAs) that share similar species or natural communities and ecological processes. NCAs include unoccupied or unsurveyed areas that are within the same ecological system that the species or natural communities require. NCAs contain PCAs with an obvious repeating pattern (that is, the same species or natural communities are in each associated PCA).

B. A mostly intact, lightly fragmented landscape that supports wide-ranging species and large scale disturbances. NCAs include unoccupied or unsurveyed areas that demonstrate the connectivity of the landscape. NCAs contain PCAs that may occur at a variety of ecological scales.

NCA Site ID

Site ID of the NCA associated with this PCA.

NCA Site Code

Site code of the NCA associated with this PCA.

NCA Site Name

Official CNHP site name of the NCA associated with this PCA.

Site Relations

Comments that explain the relationship between this site and any nested, overlapping, or adjacent sites.

LOCATORS

Nation

State

Latitude

Degrees, Minutes, Seconds. Datum is NAD 27. Calculated in GIS.

Longitude

Degrees, Minutes, Seconds. Datum in NAD 27. Calculated in GIS.

USGS 7.5 Minute Quadrangle

Calculated in GIS.

Quad Code

Quad Name

County

Calculated in GIS.

Watershed Code

8 digit U.S.G.S. hydrological unit code. Calculated in GIS.

Watershed Name

U.S.G.S. watershed name. Calculated in GIS.

Township/Range/Section (TRS) - Public Land Survey System

Calculated in GIS.

Township/Range

Section

Meridian

TRS Note

Site Directions [provided with Level 1 data only]

Specific directions to the site provided by the designer or version author.

SITE DESCRIPTION**Minimum Elevation**

Minimum elevation provided by the designer or version author.

Maximum Elevation

Maximum elevation provided by the designer or version author.

Site Description

General visual description (or word picture) of the principal physical and natural features on the site.

Key Environmental Factors

Description of the driving factors or key environmental variables that are known to exert a major influence on the biota at the site (e.g., seasonal flooding, wind, soil type).

Climate Description

General comments concerning climate and weather patterns, wind patterns, seasonal and annual variations, as well as temperature and precipitation patterns characteristic of the site.

Land Use History

Comments concerning past land uses on this site (such as mining, logging, shifting cultivation, etc.).

Cultural Features

Comments concerning any historic, cultural, or archaeological features found on the site (e.g., pictographs, petroglyphs, burial mounds, prehistoric artifacts).

SITE DESIGN**Site Map**

Indicates whether a site boundary was field verified or drawn from desktop references.

Domain values for Site Map are:

P – partial; drawn from desktop references

Y – field verified by CNHP personnel

Mapped Date

Date site boundary was last redrawn.

Designer

CNHP biologist responsible for drawing the site boundary.

Boundary Justification

Explanation of the biological rationale used to determine the ecological boundaries for the site.

Primary Area

Area of PCA polygon. Calculated in GIS.

SITE SIGNIFICANCE**Biodiversity Significance Rank**

Value that indicates the rating that best describes the significance of the site in terms of its biological diversity.

Domain values for Biodiversity Significance are:

B1: Outstanding Biodiversity Significance

B2: Very high Biodiversity Significance

B3: High Biodiversity Significance

B4: Moderate Biodiversity Significance

B5: General interest/open space

B?: Unknown

Biodiversity Significance Comments

Comments that justify the rating assigned for the site in the Biodiversity Significance field.

Other Values Rank

Value that indicates the rating that best describes the significance of the site in terms of its aesthetic, recreational, open space, and other ecological values; this includes its role in maintaining ecosystem health (e.g., by providing game and wildlife habitat, aquifer recharge functions, erosion control).

Domain values for Other Values are:

- V1 - Outstanding values
- V2 - High values
- V3 - Moderate values
- V4 - No known values
- V5 - Negative or counter values
- V? - Unknown
- (null) - Not assessed

Other Values Comments

Comments that justify the rating assigned for the site in the Other Values field.

Protection Urgency Rank [provided with Level 1 data only]

Value that indicates the rating that best describes the urgency to protect the site. The urgency for protection action (not to be confused with the urgency for management action) will generally increase with impending threats to the site until legal, political, or other administrative measures are taken.

Domain values for Protection Urgency are:

- P1 - Immediately threatened/outstanding opportunity
- P2 - Threat/opportunity within 5 years
- P3 - Definable threat/opportunity, but not within 5 years
- P4 - No threat or special opportunity
- P5 - No action to be taken on this site
- P? - Unknown

Protection Urgency Comments [provided with Level 1 data only]

Comments that justify the rating assigned for the site in the Protection Urgency field.

Management Urgency Rank [provided with Level 1 data only]

Value that indicates the rating that best describes the urgency to manage one or more Elements at the site. The urgency for management action (not to be confused with the urgency for legal protection action) requires stewardship intervention in order to maintain EOs at the site.

Domain values for Management Urgency are:

- M1 - Essential within 1 year to prevent loss
- M2 - Essential within 5 years to prevent loss
- M3 - Needed within 5 years to maintain quality
- M4 - Not needed now; no current threats; may need in future
- M5 - Not needed; no threats anticipated
- M? - Unknown

Management Urgency Comments *[provided with Level 1 data only]*

Comments that justify the rating assigned for the site in the Management Urgency field.

LAND MANAGEMENT ISSUES

Land Use Comments

Description of the current and past land use, improvements, and structures on the site.

Natural Hazard Comments

Description of the potential natural hazards (e.g., cliffs, caves, waterfalls) on the site, along with any precautions that should be taken by stewards.

Exotics Comments

Description of potentially damaging exotic (i.e., alien) flora and fauna (e.g., kudzu, honeysuckle, purple loosestrife, periwinkle, English ivy, feral goats, pigs) on the site.

Offsite

Description of off-site land uses (e.g., farming, logging, grazing, dumping, watershed diversion), and how these uses might affect the site, Elements on the site, and management of the site.

Information Needs

Summary of the information that is still needed in order to effectively manage the site and Elements on it.

Management Needs *[provided with Level 1 Data only]*

Summary of the expected management needs for the site and the Elements on it.

Managed Area Relations *[provided with Level 1 Data only]*

Explanation of the site/Managed Area relationship, if a Managed Area has been (or will be) established to protect the site.

Protection Comments *[provided with Level 1 Data only]*

Summary of the general level of protection currently afforded the site that indicates the current protection status of component Tracts.

ASSOCIATED ELEMENTS OF BIODIVERSITY

(Tracked Elements known from the area of a given PCA.)

Element

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Elements may be native or exotic at a particular location and collectively represent the full array of biological and ecological diversity for the geographic area covered. Elements may serve as the targets of Heritage inventory. Typically, these targets include native, regularly occurring vulnerable species (including infraspecific taxa and populations) and exemplary ecological communities.

Element State ID

Unique state identifier for an Element.

State Scientific Name

State scientific name for an Element having occurrences associated with this PCA.

State Common Name

State common name for an Element having occurrences associated with this PCA.

Global Rank

The global element rank that best characterizes the relative rarity or endangerment of the element worldwide. Factors other than the number of occurrences may be considered when assigning a global rank. Global ranks are derived primarily by staff at the Central Heritage Conservation Science Department, unless CNHP has lead responsibility for that element.

Domain values for Global Rank are:

G1 - Globally critically imperiled; typically 5 or fewer occurrences

G2 - Globally imperiled; typically 6 to 20 occurrences

G3 - Globally vulnerable; typically 21 to 100 occurrences

G4 - Globally apparently secure; usually > 100 occurrences

G5 - Globally demonstrably secure although it may be rare in parts of its range

G#G# - A range between two of the numeric ranks; indicates uncertainty about the rarity of the element

G? - Unranked; element is not yet ranked globally

GU - Unrankable; not enough information is known

GH - Historically known with hopes of rediscovery

GX - Extinct; unlikely to be rediscovered

T# - Rank applies to a subspecies or variety

Q - Taxonomic status is questionable

C - Element is extant only in captivity or cultivation
GNR - Not ranked globally

State Rank

The state element rank that best characterizes the relative rarity or endangerment of the element statewide. Factors other than the number of occurrences may be considered when assigning a state rank. State ranks are derived by CNHP staff.

Domain values for State Rank are:

S1 - State critically imperiled; typically 5 or fewer occurrences
S2 - State imperiled; typically 6 to 20 occurrences
S3 - State vulnerable; typically 21 to 100 occurrences
S4 - State apparently secure; usually > 100 occurrences
S5 - State demonstrably secure
S#S# - A range between two of the numeric ranks; indicates uncertainty about the rarity of the element
S? - Unranked; element is not yet ranked in the state
SU - Unrankable; not enough information is known
SH - Historically known with hopes of rediscovery
SX - Extinct; unlikely to be rediscovered
SE - An exotic established in the state; native to a nearby region
SA - Accidental; includes species (usually birds or butterflies) recorded once or twice or only at very great intervals, hundreds or thousands of miles outside their usual range
B - Rank refers to the breeding population of the element
N - Rank refers to the nonbreeding population of the element
C - Element is extant only in captivity or cultivation
SNR - Not ranked in the state

Driving Site Rank

Yes or No, indicates whether this EO is the EO which is driving the biodiversity rank of this PCA. A combination of Global Imperilment Rank, State Imperilment Rank, and EO Rank factors determine if a given EO drives the biodiversity rank of a PCA that supports it.

REFERENCES

Reference ID

The identifier for a reference available for this PCA.

Full Citation

Formal citation for a reference associated with the PCA.

ADDITIONAL TOPICS

Additional Topics

Specific comments on any significant additional nonstandard topics that have not been formally addressed by one of the standard fields in this record.

VERSION

Version Date

Date report information for the PCA was last reviewed or updated.

Version Author

Author of the current version of the transcription in this report.