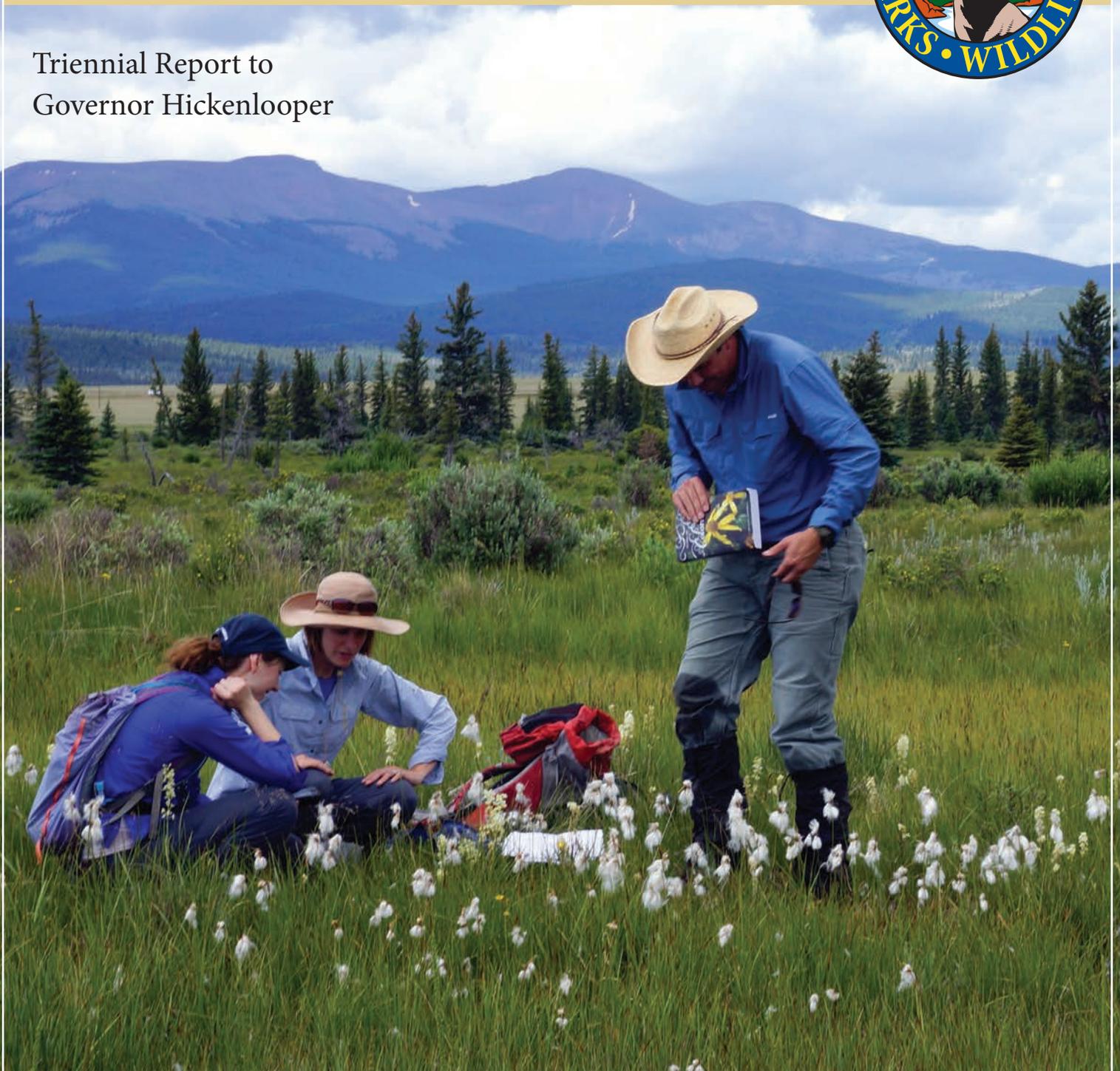


Colorado Natural Areas Program

2015 - 2017 Review



Triennial Report to
Governor Hickenlooper



Celebrating 40 Years

The Colorado Natural Areas Program (CNAP) was born 40 years ago from a growing awareness and deep appreciation of Colorado's iconic landscapes, impressive biodiversity, and unique geological and paleontological resources. With the signing of the Colorado Natural Areas Act in 1977 (C.R.S. 33-33), CNAP was established to recognize and monitor the state's finest examples of these natural elements. By building strong partnerships with private and public landowners through voluntary agreements, CNAP is integral to the protection and enhancement of rare species and significant natural features.

As the program's accomplishments and conservation successes continue to grow, CNAP's mission remains unique and vital to statewide conservation efforts and to the citizens of Colorado.

Mission: To identify, evaluate, and support the protection of specific examples of natural features and phenomena as enduring resources for present and future generations, through a statewide system of Designated Natural Areas.



95 areas

DESIGNATED STATE NATURAL AREAS



178,275 acres

OF LAND DESIGNATING COLORADO'S MOST SIGNIFICANT NATURAL FEATURES



126 species

SPECIES OF GREATEST CONSERVATION NEED ARE SUPPORTED BY THE CONSERVATION OF STATE NATURAL AREAS



40th Event at Stauton Natural Area



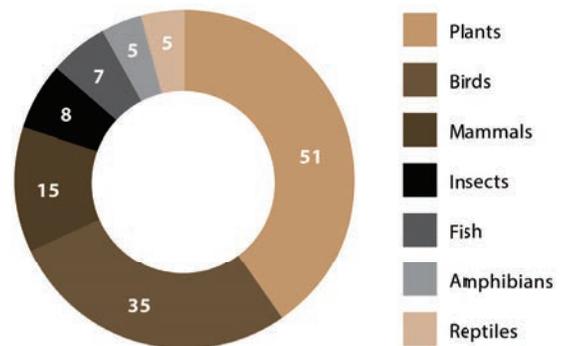
CNAP Designation as a Conservation Tool

CNAP is the only program within Colorado with a statewide system for identifying and designating unique and significant natural features and is the only program within state government with an emphasis on rare plant conservation.

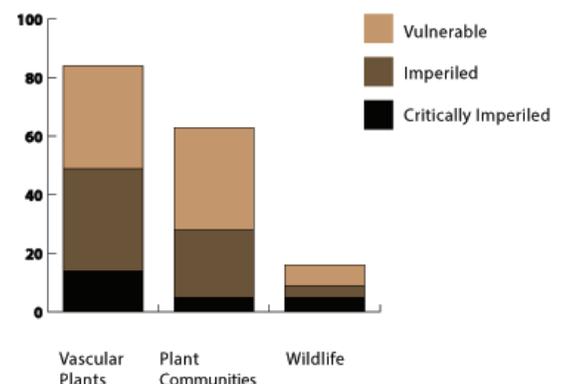
Since its establishment, CNAP has been paramount in the state's conservation efforts, identifying and evaluating over 30 remarkable geologic and paleontologic features and supporting the conservation of more than 250 rare, threatened or endangered species or communities.

CNAP is integral to the implementation of the Colorado State Wildlife Action Plan (SWAP), a guiding document for the conservation of Colorado's species of greatest conservation need and their habitats. At least 126 of the species listed in the SWAP are known to occur on state natural areas. Of the 117 plant species listed in the SWAP, 44% are present on state natural areas. Over half (51%) of Colorado's endemic plant species can also be found on state natural areas

Number of SWAP Species on Natural Areas

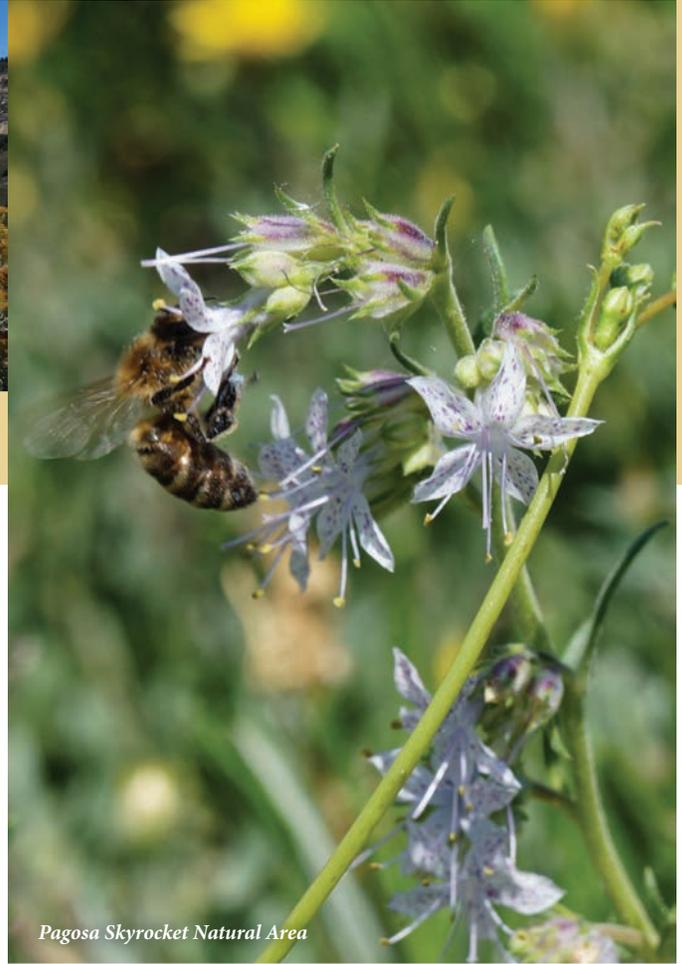


Globally Rare Features on Designated Natural Areas



I value the program for the Natural Areas it protects into the future for the state and its people.

- Dave Bathke, CNAP volunteer of 13 years



New Natural Area Designations

Between 2015-2017 CNAP designated four new state natural areas. Natural area designation serves to bring long-lasting recognition to unique natural elements on public or private lands, and formally acknowledges the essential role of landowners in the conservation of the sites which they own and manage.

Logan Wash Mine Natural Area (2015):

This natural area enlarged a previous designation, creating the Mount Callahan, Mount Callahan Saddle, and Logan Wash Natural Area. This natural area is located in Garfield County and is home to 3 of the 4 known populations of the federally threatened Parachute penstemon (*Penstemon debilis*). The Logan Wash Mine parcel is owned by Occidental Oil Shale Inc. CNAP's long-standing partnership with this energy company has resulted in protections for the rare plant and successful conservation actions towards recovery of the species.

Staunton Natural Area (2015):

Located within Colorado's newest State Park, Staunton, this designation helps to protect and conserve the globally imperiled budding monkeyflower (*Mimulus gemmiparus*), along with other rare plants, tracked plant communities, and habitat for nesting raptors. There are two designated parcels within the Park, one located in Jefferson County and owned by Colorado Parks and Wildlife, and the second located in Park County and owned by the Colorado State Land Board.

Corral Bluffs Natural Area (2017):

Corral Bluffs boasts world class paleontological resources and includes one of our state's finest fossil forests. Twelve fossil taxa from the Age of Mammals have been found here. The natural area is located in El Paso County and is owned by the City of Colorado Springs.

Pagosa Skyrocket Natural Area (2017):

This natural area is home to over half of the world's known population of the federally endangered Pagosa skyrocket (*Ipomopsis polyantha*). It also includes valuable wetland habitat and other tracked species. The property is located in Archuleta County and is owned by Colorado Parks and Wildlife.

There is no other program in the state that links state government to the identification and designation of natural areas of high value on both public and private property.

– Lynn Riedel, City of Boulder, Open Space and Mountain Parks, Grassland Plant Ecologist, CNAP volunteer

Steering the Ship: Colorado Natural Areas Council

Established in statute, the Colorado Natural Areas Council provides an advisory role to CNAP and is responsible for approving the natural areas registry and making recommendations to the Parks and Wildlife Commission on natural area designations.

In 2016, the Council designed a strategic plan to align natural area designations into a comprehensive vision for the conservation of iconic landscapes and unique habitats in Colorado. Accordingly, the Council is working to foster a robust and sustainable Natural Areas System, which builds on the program's core relationships with private and public landowners, and workforce of dedicated volunteer stewards to lend new protections to even more of the state's most significant natural features.

Learning from our natural areas opens the door to understanding how plant and animal life adapts to what these landscapes provide.

– Tom Nesler, Colorado Natural Areas Council
Chair, CNAP volunteer steward of 5 years

Colorado Natural Areas Council: Current Members

GOVERNOR APPOINTED

Tom Nesler, Chair | Appointed 2012
Retired, Division of Wildlife Species Conservation Manager

Ken Strom, Vice Chair | Appointed 2014
Retired, Colorado Audubon Director

Julia Kintsch | Appointed 2014
Conservation Ecologist, ECO-Resolutions LLC

Denise Culver | Appointed 2015
Wetland Ecologist, Colorado Natural Heritage Program

Dina Clark | Appointed 2017
Botanist/Herbarium Collection Manager, University of Colorado

BOARD AND COMMISSION REPRESENTATIVES

Alex Zipp | Appointed 2017
Parks and Wildlife Commission

John Shaw | Appointed 2016
Board of Land Commissioners

PREVIOUS COUNCIL MEMBERS

Michelle Zimmerman, Parks and Wildlife Commission
Gary Butterworth, Board of Land Commissioners
Michele Bloom, Board of Land Commissioners
Melissa Smeins, Bureau of Land Management
Renee Rondeau, Colorado Natural Heritage Program



Council Members

Celebrating Conservation Successes

Protecting the Pagosa Skyrocket

One of the most imperiled plants in Colorado, the Pagosa skyrocket (*Ipomopsis polyantha*), got a big conservation boost in 2016 through the purchase of an 88-acre property in Archuleta County by Colorado Parks and Wildlife. The purchase was made possible with funding from the U.S. Fish & Wildlife Service and Great Outdoors Colorado. The property harbors over half of the world's population of this federally endangered species. The property was designated as state natural area in 2017 and CNAP staff have been working cooperatively with local Colorado Parks and Wildlife staff, U.S. Fish & Wildlife Service, Colorado Natural Heritage Program, and other local partners to monitor and protect the plant. CNAP has led the charge in developing and implementing a quantitative monitoring protocol for measuring the trend of the species range-wide and contributing necessary data for the plant's recovery.

Bolstering the Budding Monkeyflower

Until recently, the budding monkeyflower (*Mimulus gemmiparus*) lived a secretive life. The species, only known from central Colorado, has a unique life history and few identified populations. CNAP partnered with the U.S. Fish & Wildlife Service and the U.S. Forest Service to expand on a pilot project initiated in 2012 to help bolster the populations of budding monkeyflower through assisted migration. Through this project, the number of known locations of the species has increased five-fold and we have learned a great deal about the plant's life history. Our conservation actions are aimed at precluding the need to list the species under the federal Endangered Species Act.

The Colorado Natural Areas Program protects and raises awareness of the things that make Colorado unique and wonderful. The program accomplishes so much and is one of our state's most amazing and cost effective programs.

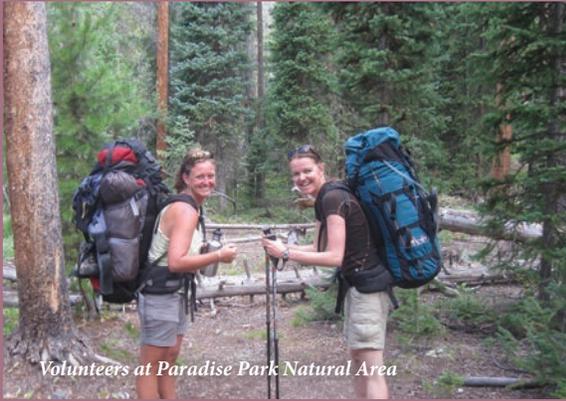
– David Anderson, Colorado Natural Heritage Program Director



Pagosa Skyrocket Monitoring



Budding Monkeyflower



Volunteers at Paradise Park Natural Area



Volunteers at Raven Ridge Natural Area

Most Valuable Assets: Volunteer Stewards & Partnerships

CNAP's capacity and impact is greatly expanded through the strength of its partnerships and the force of its volunteer stewards – engaged citizens who dedicate their time and expertise to monitoring designated Natural Areas. The information collected by CNAP's volunteer stewards helps to ensure the long-term well-being of state natural areas and is valuable to both the program and its partners.

State natural area designations are made possible by voluntary conservation agreements between the landowner and the State; currently, 108 agreements with over 50 different partners exist.

Collectively, the Program, volunteer stewards, and partners work together to ensure that prime examples of our natural heritage are conserved for future generations. These accomplishments have contributed directly to the state's efforts to prevent and reverse endangered species listings, to protect significant geologic and fossil resources, and conserve valuable habitat.

Collectively, the Program, volunteer stewards, and partners work together to ensure that prime examples of our natural heritage are conserved for future generations.



70 total

VOLUNTEER STEWARDS



\$120,000 value

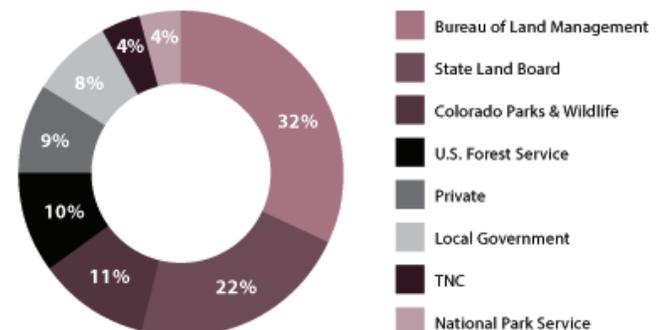
4,600 VOLUNTEER HOURS IN THE PAST 3 YEARS



10 years

1/3 OF CNAP VOLUNTEER STEWARDS HAVE SERVED 10 YEARS OR MORE

Land Ownership of Designated Natural Areas



Natural Areas Status Reports

Table One:

**FEATURES AND CONDITIONS OF
DESIGNATED NATURAL AREAS**

Table Two:

**FEATURES AND CONDITIONS OF
REGISTERED NATURAL AREAS**

CNAP uses volunteer stewards to monitor sites, which is a very enriching experience for members of the public and an effective way for this small state program to keep in touch with the status of many sites across the state.

– Lynn Riedel, City of Boulder, Open Space and Mountain Parks, Grassland Plant Ecologist, CNAP volunteer



TABLE ONE: FEATURES AND CONDITIONS OF DESIGNATED NATURAL AREAS

| NATURAL AREA NAME | OWNER | COUNTY | SIGNIFICANT FEATURES TYPE | CONDITION |
|--|---------|--------------------|---|--|
| KEY: BLM= Bureau of Land Management CPW= Colorado Parks and Wildlife NPS= National Park Service TNC= The Nature Conservancy USFS= U.S. Forest Service SLB = State Land Board | | | | |
| Aiken Canyon | SLB | El Paso | Plant Communities, Geology | Stable |
| Antero-Salt Creek | SLB | Park | Wildlife, Plants, Plant Communities | Stable; Stewardship Action Plan implementation forthcoming |
| Arikaree River | SLB | Yuma | Plant Communities, Wildlife, Plants | Stable |
| Badger Wash | BLM | Mesa | Plants, Plant Communities | Stable |
| Blacks Gulch | BLM | Rio Blanco | Fossils | Stable |
| Blue Mountain- Little Thompson Fault | Private | Larimer | Geology, Plants | Stable; flood impact recovery |
| Bonny Prairie | CPW | Yuma | Plants, Plant Communities | Stable; rare plant monitoring |
| Boulder Mountain Park | City | Boulder | Plants, Plant Communities, Geology, Wildlife | Stable; flood impact recovery |
| Brush Creek Fen | Private | Custer | Plants, Plant Communities, Wildlife | Stable |
| California Park | SLB | Routt | Wildlife, Plant Communities | Stable |
| Castlewood Canyon | CPW/SLB | Douglas | Plants, Plant Communities, Wildlife | Stable; recreation management |
| Chalk Bluffs | SLB | Weld | Wildlife, Plants, Plant Communities, Geology | Stable |
| Colorado Tallgrass Prairie | City | Boulder | Plant Communities | Stable |
| Comanche Grassland Lesser Prairie Chicken | USFS | Baca | Wildlife | Lesser Prairie Chickens currently do not occur on property |
| Copeland Willow Carr | City | Boulder | Plant Communities | Stable |
| Corral Bluffs | City | El Paso | Fossils, Wildlife | Stable |
| Cross Mountain Canyon | BLM | Moffat | Wildlife, Geology, Plants | Stable |
| Dakota Hogback | County | Jefferson | Geology, Fossils, Plants, Plant Communities, Wildlife | Stable |
| Deer Gulch | BLM | Rio Blanco | Plant Communities, Plants | Stable |
| Dome Rock | CPW | Teller | Wildlife, Geology, Plant Communities | Stable; noxious weed management |
| Droney Gulch | BLM/SLB | Chaffee | Plants | Stable; rare plant monitoring |
| Duck Creek | BLM | Rio Blanco | Plants | Stable; rare plant monitoring |
| Dudley Bluffs | BLM | Rio Blanco | Plants, Plant Communities | Stable; rare plant monitoring |
| East Lost Park | USFS | Park | Plants | Stable |
| East Sand Dunes | SLB | Jackson | Geology, Plants | Stable |
| Elephant Rocks | BLM | Rio Grande | Geology, Plants | Stable |
| Escalante Canyon | BLM | Delta/ Montrose | Wildlife, Plants, Plant Communities, Geology | Stable |
| Fairview | BLM | Montrose | Plants | Stable; rare plant monitoring |
| Fourmile Creek | SLB | Park | Plant Communities, Plants | Stable; Stewardship Action Plan implementation forthcoming |
| Fruita Paleontological Locality | BLM | Mesa | Fossils | Stable |
| Garden Park Fossil Locality | BLM | Fremont | Fossils, Plants | Stable; rare plant monitoring |
| Gateway Palisade | BLM | Mesa | Geology, Plants | Stable |
| Geneva Basin Iron Fen | County | Clear Creek | Plants, Plant Communities, Geology | Stable |
| Gothic | USFS | Gunnison | Plant Communities | Stable |
| Gunnison Gravels | BLM | Mesa | Geology | Stable |
| Haviland Lake | CPW | La Plata | Plants, Plant Communities, Wildlife | Stable |
| High Creek Fen | TNC/SLB | Park | Plants, Plant Communities | Stable |
| High Mesa Grassland | BLM | Fremont | Plants, Plant Communities | Stable |
| Hoosier Ridge | USFS | Park | Plants | Stable; rare plant monitoring |
| Hurricane Canyon | USFS | El Paso | Plant Communities, Plants | Stable |
| Indian Spring | NPS | Saguache | Insects, Geology, Plant Communities | Stable |
| Indian Springs Trace Fossil Locality | Private | Fremont | Fossils | Stable |
| Irish Canyon | BLM\SLB | Moffat | Geology, Plants, Plant Communities | Stable |
| Jimmy Creek | SLB | Larimer | Plants | Stable |
| Ken Caryl Ranch | Private | Jefferson | Plants, Plant Communities, Geology, Wildlife | Stable |
| Kremmling Cretaceous Ammonite Locality | BLM\SLB | Grand | Fossils | Stable |

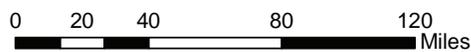
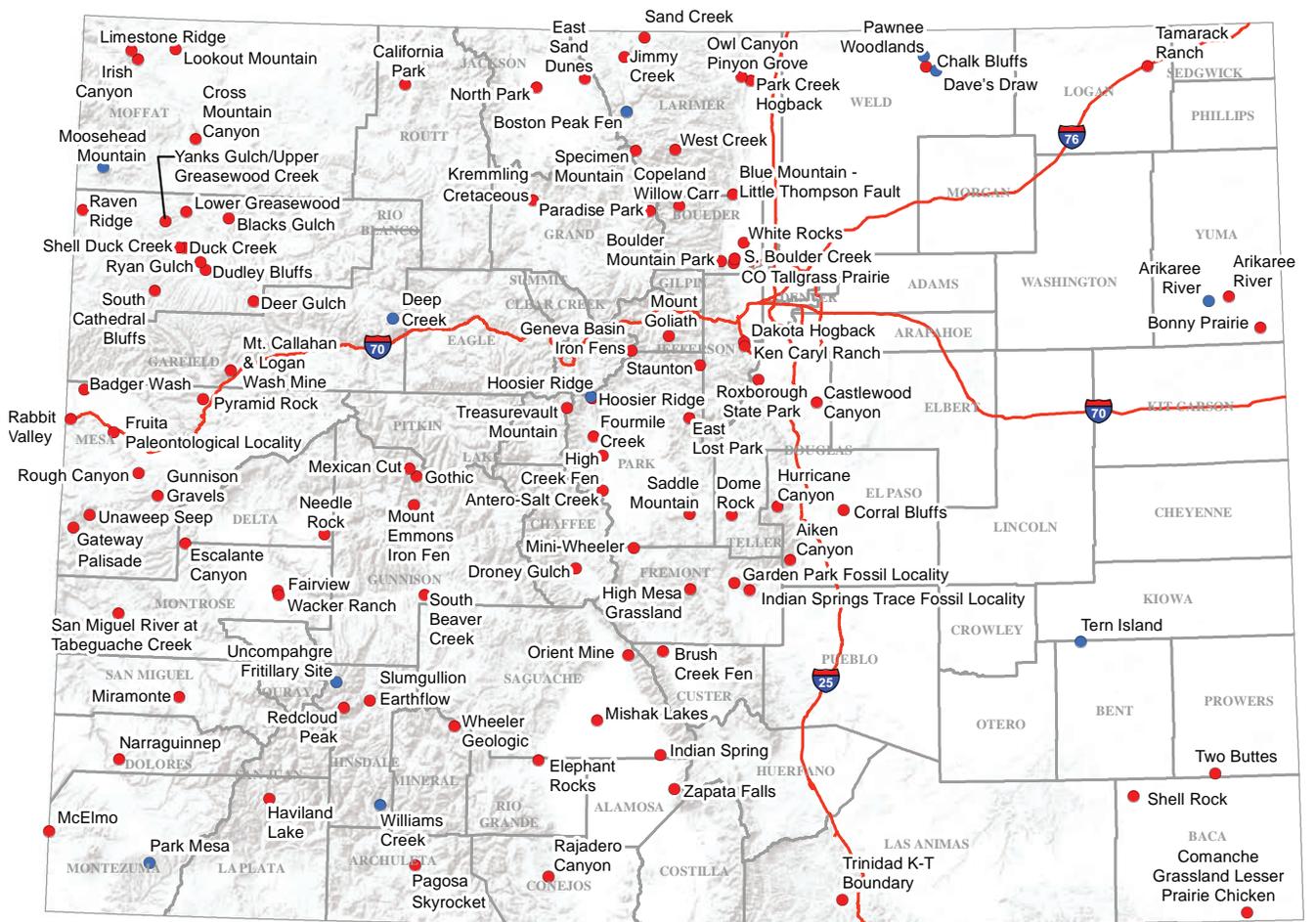
TABLE ONE: FEATURES AND CONDITIONS OF DESIGNATED NATURAL AREAS

| NATURAL AREA NAME | OWNER | COUNTY | SIGNIFICANT FEATURES TYPE | CONDITION |
|---|-------------------------|--------------------|--|--|
| Limestone Ridge | BLM | Moffat | Geology, Plants, Plant Communities | Stable |
| Lookout Mountain | BLM | Moffat | Geology, Plants, Plant Communities | Stable |
| Lower Greasewood Creek | BLM | Rio Blanco | Plants, Plant Communities | Stable |
| McElmo | BLM | Montezuma | Wildlife | Stable |
| Mexican Cut | TNC | Gunnison | Wildlife, Plant Communities | Stable |
| Mini-Wheeler | SLB | Fremont | Geology, Plant Communities, Plants | Stable |
| Miramonte | CPW | San Miguel | Wildlife, Plants | Stable; rare plant monitoring |
| Mishak Lakes | TNC | Saguache | Wildlife, Plant Communities | Hydrologic impacts |
| Mount Callahan, Mount Callahan Saddle & Logan Wash Mine | Private | Garfield | Plants, Plant Communities | Stable; rare plant monitoring |
| Mount Emmons Iron Fen | USFS | Gunnison | Plants, Plant Communities, Geology | Stable; restoration work |
| Mount Goliath | USFS | Clear Creek | Plant Communities | Stable |
| Narraguinsep | USFS | Dolores | Plant Communities | Stable |
| Needle Rock | BLM | Delta | Geology | Stable |
| North Park | BLM | Jackson | Plants | Stable |
| Orient Mine | Private | Saguache | Wildlife, Plant Communities | Stable; bat species monitoring |
| Owl Canyon Pinyon Grove | SLB\ Private\ CPW | Larimer | Plant Communities | Stable |
| Pagosa Skyrocket | CPW | Archuleta | Plants, Wildlife | Stable; rare plant monitoring |
| Paradise Park | NPS | Grand | Wildlife, Plant Communities | Stable |
| Park Creek Hogback | SLB | Larimer | Plants | Stable; rare plant monitoring |
| Pyramid Rock | BLM | Mesa | Geology, Plants | Stable; rare plant monitoring |
| Rabbit Valley | BLM | Mesa | Fossils | Stable |
| Rajadero Canyon | BLM\SLB | Conejos | Plants | Stable |
| Raven Ridge | BLM | Rio Blanco | Geology, Plants | Stable; rare plant monitoring |
| Redcloud Peak | BLM | Hinsdale | Insects | Stable; rare butterfly monitoring |
| Rough Canyon | BLM | Mesa | Geology, Wildlife, Plants | Stable |
| Roxborough | CPW\SLB | Douglas | Geology, Plant Communities, Plants, Wildlife | Stable; recreation management |
| Ryan Gulch | BLM | Rio Blanco | Plants | Stable |
| Saddle Mountain | USFS\SLB | Park | Plant Communities | Stable |
| San Miguel at Tabeguache Creek | TNC | Montrose | Plant Communities | Stable |
| Sand Creek | SLB | Larimer | Plant Communities, Plants | Stable |
| Shell Duck Creek | Private | Rio Blanco | Plants | Stable; rare plant monitoring |
| Shell Rock | SLB | Baca | Plants | Stable |
| Slumgullion Earthflow | USFS\BLM | Hinsdale | Geology | Stable |
| South Beaver Creek | BLM | Gunnison | Plants | Stable; rare plant monitoring |
| South Boulder Creek | City | Boulder | Wildlife, Plants, Plant Communities | Stable; flood impact recovery, road expansion mitigation |
| South Cathedral Bluffs | BLM | Rio Blanco | Plants, Plant Communities | Stable |
| Specimen Mountain | NPS | Larimer/ Grand | Wildlife, Plant Communities | Stable |
| Staunton | CPW\SLB | Jefferson/ Park | Plants, Plant Communities, Wildlife | Stable; rare plant monitoring & research |
| Tamarack Ranch | CPW | Logan | Wildlife, Plant Communities | Stable |
| Treasurevault Mountain | SLB | Park/Lake | Plants, Plant Communities, Wildlife | Stable |
| Trinidad K-T Boundary | CPW | Las Animas | Geology | Stable |
| Two Buttes | Private | Prowers/ Baca | Geology, Wildlife, Plants | Stable |
| Unaweeep Seep | BLM | Mesa | Insects, Plants, Plant Communities | Stable |
| Wacker Ranch | CPW | Montrose | Plants | Stable; rare plant monitoring |
| West Creek | NPS | Larimer | Wildlife, Plant Communities | Stable |
| Wheeler Geologic | USFS | Mineral | Geology | Stable |
| White Rocks | City | Boulder | Geology, Wildlife, Plants | Stable |
| Yanks Gulch/Upper Greasewood Creek | BLM | Rio Blanco | Plants, Plant Communities | Stable |
| Zapata Falls | SLB | Alamosa | Geology, Wildlife, Plant Communities | Stable |

TABLE TWO: FEATURES AND CONDITIONS OF REGISTERED NATURAL AREAS

| NATURAL AREA NAME | OWNER | COUNTY | SIGNIFICANT FEATURES TYPE | CONDITION |
|------------------------|---------|-----------|--|---|
| Arikaree River | TNC | Yuma | Wildlife, Plant Communities | Stable |
| Boston Peak Fen | USFS | Larimer | Plants, Plant Communities | Unknown |
| Daves Draw | USFS | Weld | Plant Communities | Stable |
| Deep Creek | USFS | Garfield | Geology, Plants, Wildlife, | Unknown |
| Hoosier Ridge | USFS | Summit | Plants | Stable |
| Moosehead Mountain | BLM | Moffat | Plant Communities | Unknown |
| Park Mesa | NPS | Montezuma | Plants, Plant Communities, Wildlife, Geology | Stable |
| Pawnee Woodlands | Private | Weld | Plants, Plant Communities | Unknown |
| Tern Island | SLB | Bent | Wildlife | Hydrologic impacts, rare species monitoring |
| Uncompahgre Fritillary | USFS | Hinsdale | Insects | Unknown |
| Williams Creek | USFS | Hinsdale | Plant Communities | Unknown |

DESIGNATED AND REGISTERED STATE NATURAL AREAS



- Designated Natural Area
- Registered Natural Area

State of Colorado

Governor:

JOHN W. HICKENLOOPER

Department of Natural Resources:

BOB RANDALL, EXECUTIVE DIRECTOR

Colorado Parks & Wildlife:

BOB BROSCHEID, DIRECTOR

Colorado Natural Areas Council:

TOM NESLER, CHAIR

KEN STROM, VICE CHAIR

ALEX ZIPP, PARKS AND WILDLIFE COMMISSION

JOHN SHAW, BOARD OF LAND COMMISSIONERS

JULIA KINTSCH, MEMBER

DENISE CULVER, MEMBER

DINA CLARK, MEMBER



COLORADO NATURAL AREAS PROGRAM

cpw.state.co.us/aboutus/pages/CNAP.aspx