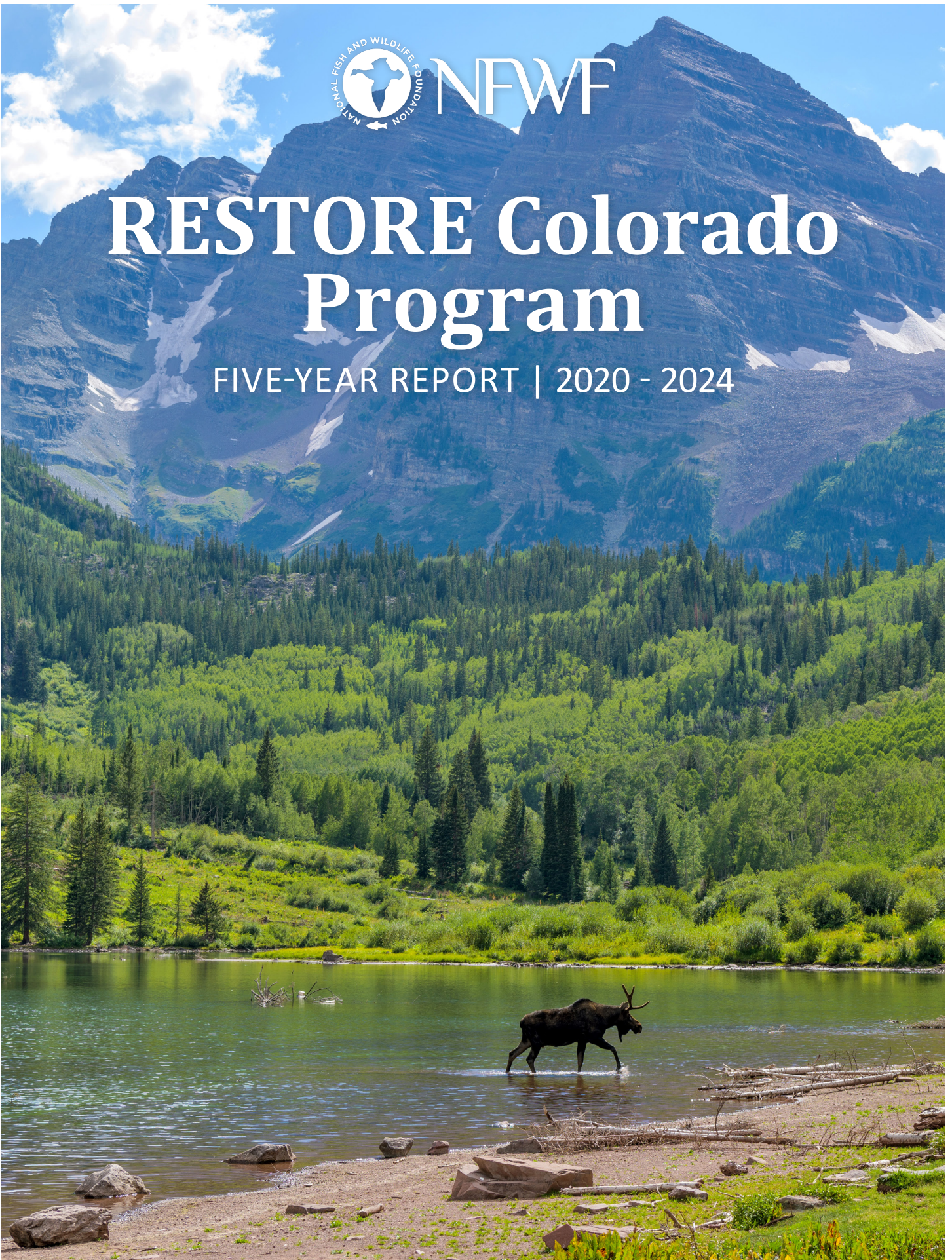





RESTORE Colorado Program

FIVE-YEAR REPORT | 2020 - 2024



North fork of the Gunnison
River in Colorado

Colorado boasts spectacular scenery, abundant wildlife, and diverse communities and economies that depend on its rich natural resources. But these resources are increasingly threatened by habitat loss, overuse, and the complexities of managing a landscape divided into a patchwork of public and private lands. Faced with growing population pressures and the consequences of past land use decisions that are no longer viable, Colorado is pioneering new approaches to conservation and resource management.

Elk in Colorado



A New Approach

While our neighbors in Utah and Wyoming created funds* to address habitat restoration needs in their states, Colorado didn't have a similar source of funding specifically for at-scale restoration until 2020, when the Restoration and Stewardship of Outdoor Resources and Environment (RESTORE) Colorado Program was established. Colorado has forged its own path by developing a collaborative model that combines the best qualities of public agencies, corporations, and philanthropy to work together across the state's spectacular landscapes.

The RESTORE Colorado Program was launched by a consortium of funders led by the Gates Family Foundation, Great Outdoors Colorado, Colorado Parks and Wildlife and the National Fish and Wildlife Foundation (NFWF). To date, the program has funded 59 projects to address conservation priorities statewide, including rivers and streams, native grasslands, sagebrush, forests, and big

game winter range habitat. Conservation grants awarded through RESTORE address critical challenges facing Colorado's wildlife and communities – from human-wildlife traffic conflicts to the restoration of degraded streams and rivers and the development of rangeland restoration techniques to benefit wildlife and ranching communities – all for the betterment of Colorado.

Over the past five years, RESTORE has become an effective framework for addressing our habitat and resource challenges. As outlined in this report, we have accomplished so much together in such a brief period. But most importantly, RESTORE has shown us what is still possible and what we can do together in the years to come.

**Funds are from Utah Watershed Restoration Initiative (WRI) and Wyoming Wildlife and Natural Resource Trust (WWNRT).*



Bighorn sheep

Five Years of Partnership in Colorado

RESTORE Colorado and its partners are working to preserve and restore the state's wild and working lands for future generations. Over the past five years, NFWF has partnered with state, federal and private entities to move the needle on meaningful, landscape-scale habitat restoration projects. The unique, collaborative funding model draws on state and local expertise in natural resource management, leveraging federal resources with state wildlife programs, private philanthropy and corporations operating in Colorado.





Conservation Impact

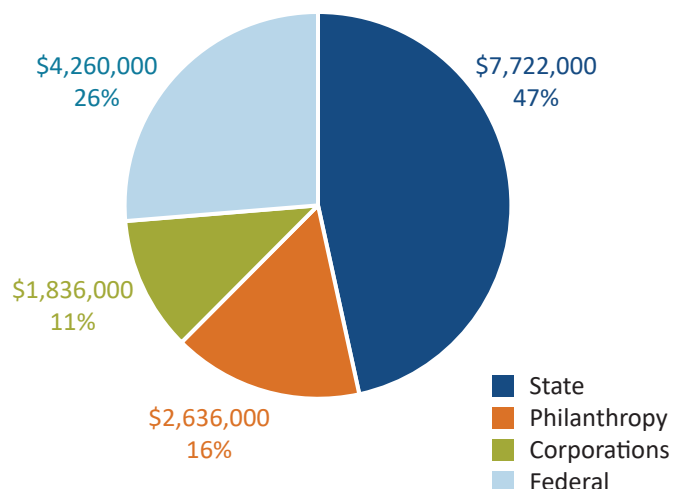
The 59 projects funded through RESTORE Colorado are opening and protecting big game migration corridors, augmenting watershed resilience, and restoring grasslands, sagebrush rangeland, wetlands, and rivers and streams. Since 2020, NFWF has awarded more than \$16.5 million in grant funding from state, federal, corporate and private foundation partners and leveraged more than \$30.1 million in grantee matching contributions for a total conservation impact of \$46.5 million.

- Restore 90 miles of instream habitat
- Restore 12,600 acres of grasslands by removing invasive annual grasses like cheatgrass

These conservation efforts not only benefit wildlife and open spaces but also provide direct economic benefits to local communities throughout the state. To date, the program has directly supported 157 direct, indirect and induced jobs.

The RESTORE program provides an opportunity for annual conservation investments and long-term collaborations. The program has granted more than \$7.7 million in state funding and has secured over \$8.8 million for conservation projects in Colorado from external sources.

2020-2024 ALLOCATIONS BY FUND TYPE



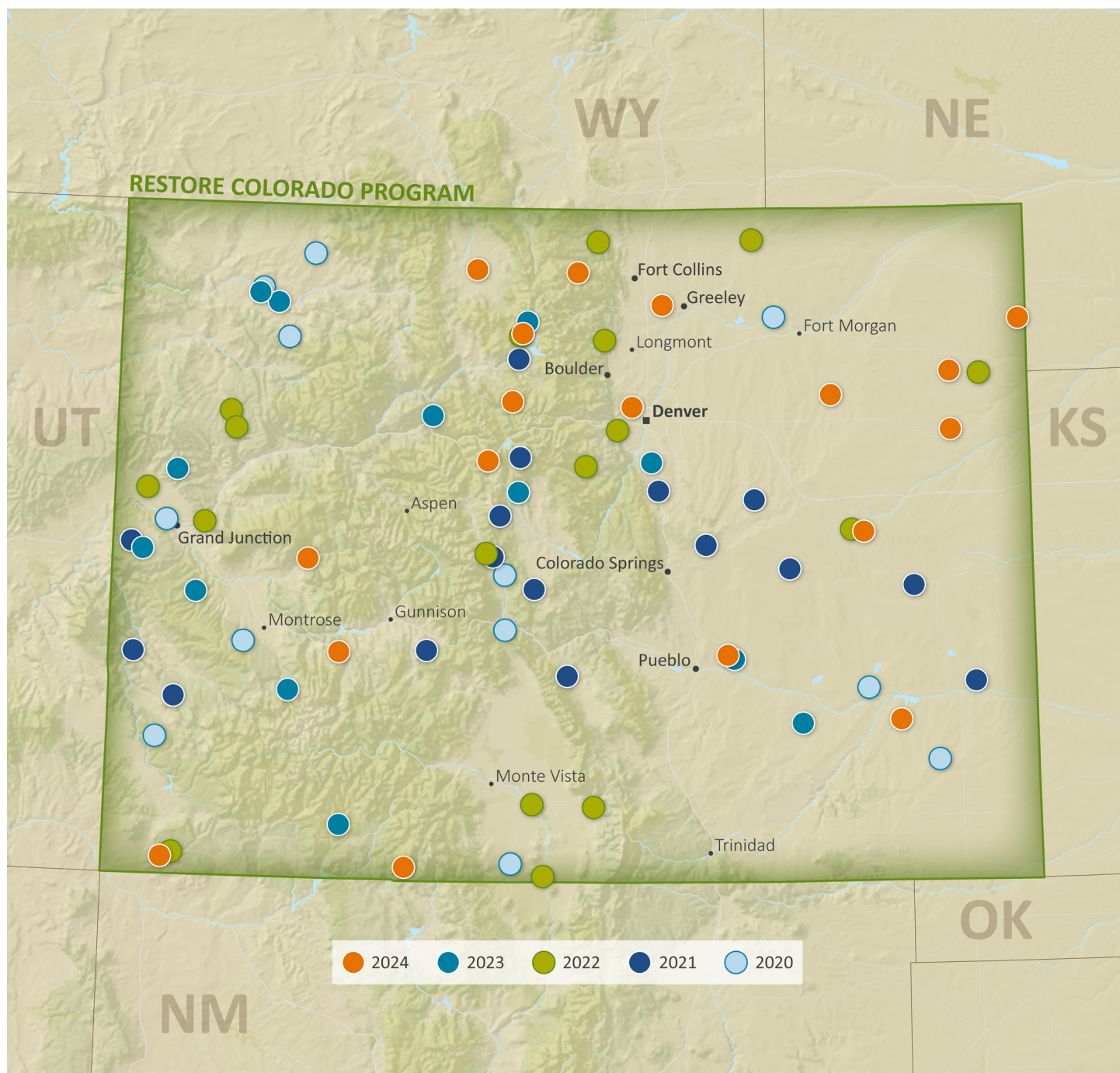
CUMULATIVE IMPACT 2020-PRESENT

The 59 grants supported in the first five years of this program have cumulatively worked to:

- Restore 5,400 acres of mesic habitat with low-tech process-based structures
- Improve 290,000 acres through grazing management to benefit wildlife and producers
- Remove or improve 150 miles of fencing to wildlife-friendly specifications
- Restore 3,900 acres of conifer or aspen forest habitats to support big game winter range habitat

Landscape-Scale Conservation

The RESTORE Colorado program supports projects that directly and measurably contribute to landscape-scale conservation. It prioritizes four key areas where investments can have the greatest impact on ecological connectivity and resilience, and which align with state and federal wildlife management plans. To address complex natural resource challenges effectively and holistically, projects often integrate multiple priority areas and habitat types.





Migration Corridors and Connectivity

Migration corridors throughout Colorado provide crucial linkages between summer and winter ranges for a host of wildlife species including pronghorn, mule deer, and elk. But large mammal movements are threatened by an ever-expanding network of roadways, which encroach into and divide Colorado's wild spaces. To promote connectivity for wildlife and human safety, the RESTORE Colorado program has supported the construction of wildlife overpasses across busy highways, restored summer and winter range habitats at either end of large migration routes, and removed hundreds of miles of derelict fencing which entangle and harm animals navigating a complex matrix of state, federal and private lands.

WILDLIFE MITIGATION MEASURES PREVENT WILDLIFE-VEHICLE COLLISIONS ALONG MIGRATION CORRIDORS

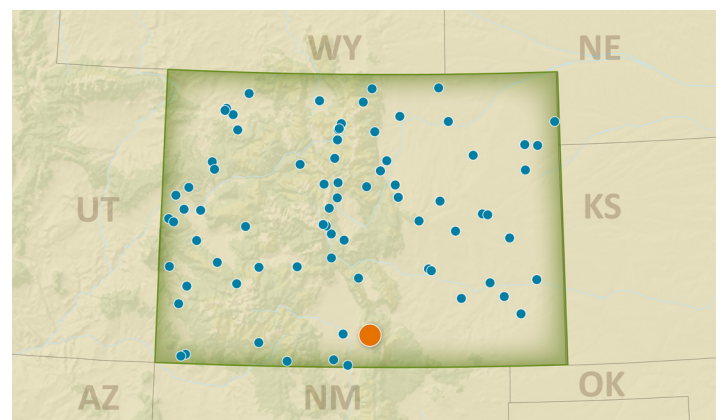
Mule deer and elk are iconic Coloradan species, playing a vital role in maintaining a balanced ecosystem and supporting the state's economy through big game-related wildlife recreation. However, mule deer populations have been declining since the 1970s, while declines in elk cow and calf ratios have been observed over the past decade.

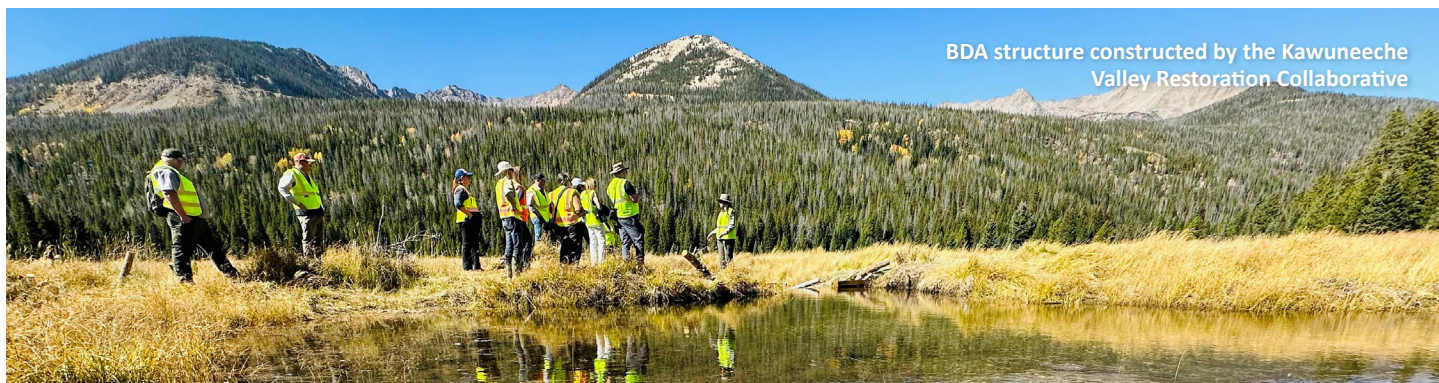
Wildlife-vehicle collisions along seasonal migration corridors are a significant factor in herd decline, causing wildlife injury and mortality, as well as motorist injury and property damage. To mitigate this issue, RESTORE Colorado has partnered with the Colorado Department of Transportation (CDOT) to install exclusionary fencing keeping wildlife off roadways and to construct wildlife underpasses allowing for safe passage.

Exclusionary and crossing structures have immediate benefits to wildlife and motorists, but CDOT will also study the effectiveness of additional wildlife-mitigation measures. Establishing proven mitigation measures will allow NFWF and its partners to focus conservation efforts where they will be most effective. To date, RESTORE has funded three projects to manage wildlife movement across roadways.

Increasing Habitat Connectivity and Driver Safety with Wildlife Underpasses on U.S. Highway 160 (CO)

Grantee Organization: Colorado Department of Transportation
Award Total: \$337,500
CDOT is constructing up to three wildlife underpass structures and installing wildlife exclusionary fencing, escape ramps and deer guards along U.S. Highway 160, east of Fort Garland, Colorado, to reduce wildlife-vehicle collisions and connect critical habitats for both mule deer and elk. This project will significantly improve wildlife movement across the highway and increase driver safety.





Watershed Resilience

Fire is a natural and healthy part of Colorado’s dynamic forest systems, but decades of fire suppression, drought and invasive species encroachment have drastically altered natural fire regimes, making the fires that do occur more damaging and dangerous for people and wildlife. Colorado’s riparian systems are not only threatened by increasing wildfire activity, but also by prolonged drought, invasive fish and the historic eradication of beavers.

The RESTORE Colorado program invests in holistic watershed projects that restore multiple habitat types including riparian, wetland, forests and other upland habitats, which seek to enhance system-level resilience. The program has supported mine drainage reclamation sites, dam removals and low-tech processed-based instream restoration that slows water’s movement through the landscape, keeping it higher for longer periods throughout the year in degraded stream channels.

ATTRACTING BEAVER TO RESTORE WATERSHED HEALTH

Beavers act as ecosystem engineers, performing critical ecological functions that contribute to biodiversity enhancement, water quality improvement, flood control, and fire and drought mitigation, among other benefits. But when beavers are removed from their environment, ecosystem health declines.

In the Kawuneeche Valley of Grand County, the reduced beaver population has contributed to a biome shift from wetlands to grasslands, loss of surface water and increased erosion. To address this decline, RESTORE Colorado partnered with Northern Colorado Water Conservancy District to attract beavers back to the Kawuneeche Valley and help reverse the ecological and hydrological degradation that has occurred in their absence.

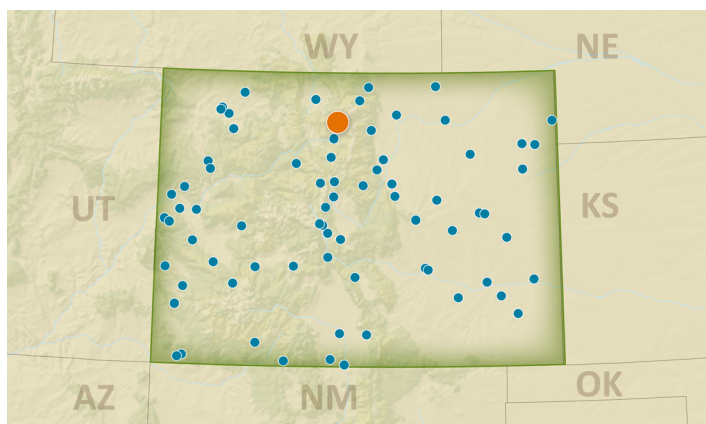
The reintroduction of beavers to their historical habitat not only benefits wildlife and the environment but also increases water quality and quantity of agricultural and drinking water. That’s why an investment in beaver habitat now is an investment in water availability for future generations. RESTORE has funded two beaver attraction projects, while 33 RESTORE projects have included hydrological, riparian, stream and wetland restoration components.

Restoring the Kawuneeche Valley to Benefit Wetlands in the North Fork Colorado River Basin

Grantee Organization: Northern Colorado Water Conservancy District

Award Total: \$300,000

This project will increase the water table, improve sediment retention and encourage beaver return to Colorado’s Kawuneeche Valley. The project goals include instream, wetland, and floodplain restoration; beaver dam analog installation; site monitoring; invasive vegetation removal; and mesic habitat hydrology restoration.





BDA structure constructed by the
Kawuneeche Valley Restoration
Collaborative



Black-footed ferret

Working Lands Conservation

Colorado's rangelands are home to a unique assemblage of wildlife adapted to this arid landscape. Though seemingly vast, these grassland and shrubland ecosystems are imperiled, occupying less than half of their original range and currently threatened by unprecedented rates of loss. In this private-lands dominated environment, it's imperative that conservationists and ranchers work together to keep rangelands intact, healthy and thriving for wildlife, livestock, and people. The RESTORE Colorado program has supported working lands restoration projects tackling invasive species eradication of cheatgrass, grazing management regimes which create habitat for wildlife and support ranchers' economic viability on the landscape, and direct support to reintroduce black-footed ferrets (the most endangered mammal in North America) back to their native range.

VIRTUAL FENCING RESTORES WILDLIFE ACCESS TO FORAGE AND REFUGE AREAS

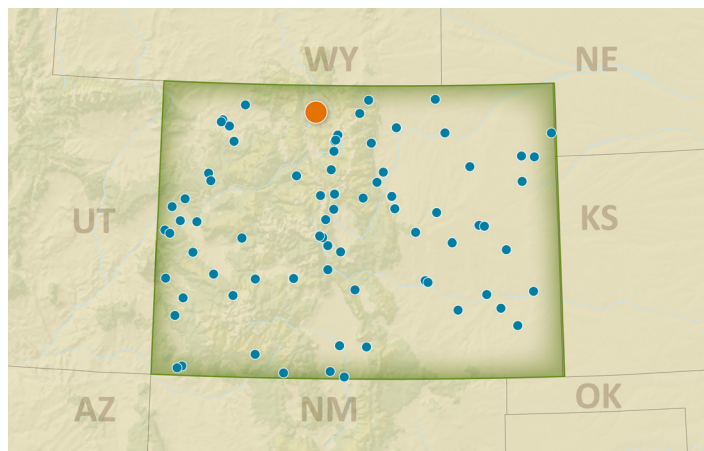
Pasture fencing is necessary for cattle grazing management, but it can impede wildlife movement and even be a cause for wildlife injury and mortality. Fortunately, virtual fencing technology gives ranchers the opportunity to control cattle movements while maintaining habitat connectivity.

RESTORE Colorado has partnered with Backcountry Hunters & Anglers to remove traditional fencing and develop virtual fencing systems in the Arapaho National Wildlife Refuge in North Park. Virtual fencing not only results in more efficient and cost-effective rotational grazing but also increases habitat quality for wildlife. RESTORE has funded seven fencing improvements, installation and removal projects.

Implementing Virtual Fencing to Increase Efficiency in Rotational Grazing in Walden (CO)

Grantee Organization: Backcountry Hunters & Anglers
Award Total: \$187,000
Backcountry Hunters & Anglers, the USFWS Arapaho National Wildlife Refuge staff and the Bureau of Land Management

Kremmling Field Office will support refuge and Bureau of Land Management grazing permit holders in the transition to virtual fencing in the Walden, Colorado area. Implementation of virtual fencing will enhance critical wildlife habitat by increasing efficiency in rotational grazing and allowing the removal of fencing impeding wildlife movement and access to essential forage and refuge areas.



Virtual fencing implementation
in Walden, Colorado





Greater sage-grouse

Sagebrush Rangelands

Colorado's Western Slope is dominated by a dynamic sagebrush biome that supports iconic Colorado wildlife including elk, mule deer, bighorn sheep and sage-grouse. The RESTORE Colorado program supports projects that work cross-jurisdictionally, bridging state, federal and private lands to restore sagebrush habitats, combat the encroachment of woody trees into sagebrush-dominated habitats, and restore mesic wet meadow habits disproportionately critical to wildlife.

THINNING DENSE WOODY VEGETATION INCREASES FORAGE PRODUCTION AND REDUCES FIRE RISK

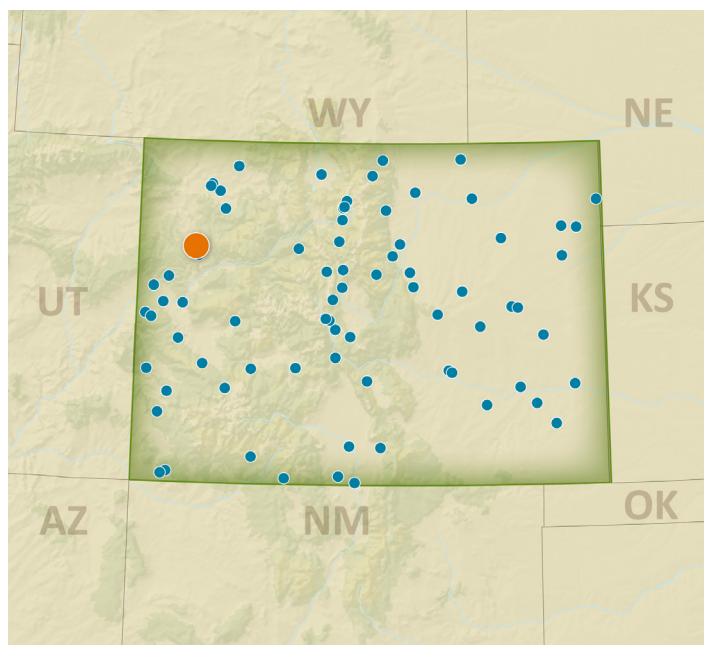
Since European settlement, pinyon-juniper woodlands have doubled or even tripled in acreage throughout the western United States. In Colorado, this has negatively impacted native species and habitat, reducing sage-grouse cover and big game forage, reducing soil moisture, outcompeting sagebrush and perennial herbaceous plants, and increasing the risk of catastrophic wildfire.

In the White River watershed — which supports a significant proportion of the state's deer and elk herds — the hazards of conifer encroachment were brought to the fore when the 2020 Pine Gulch Fire nearly spread into the watershed. RESTORE Colorado has partnered with the White River Conservation District to combat conifer encroachment in the White River watershed for the joint benefit of increasing big game forage production and reducing catastrophic wildfire risk. RESTORE has funded 11 sagebrush restoration projects, with a further four projects related to conifer encroachment and fire mitigation measures.

Improving Big Game Winter Range and Migration Routes by Removing Woody Invasives (CO)

Grantee Organization: White River Conservation District
 Award Total: \$238,900
 Project Description: The White River Conservation District will improve winter range habitat and migration routes for elk and

mule deer populations through the management of woody species encroachment on private and public lands which are part of the Stewart Gulch Coordinated Resources Management Plan for the Oldland Ranch located southwest of Meeker, Colorado. This project will treat woody invasives on 974 acres of land, opening up areas for wildlife movement and improving the quality of both wildlife and livestock forage.





Beaver in Colorado

Grant Recipients

Since 2020, RESTORE has awarded 59 grants to 41 organizations throughout the state. The following list shows the organizations RESTORE has funded and the total grant value awarded during each year of the program.

2020

Bird Conservancy of the Rockies

Combating Habitat Fragmentation and Loss in Grassland Ecosystems (CO)
\$378,500

Chaffee County

Restoring Forest Habitat in Chaffee County to Reduce Risk of Catastrophic Wildfire (CO)
\$366,300

Colorado Department of Transportation

Improving Wildlife Connectivity and Motorist Safety Across US Highway 24 (CO)
\$267,900

Colorado Rio Grande Restoration Foundation

Removing Fish Barriers and Restoring the Conejos River Floodplain (CO)
\$350,000

Dolores Public Lands Office

Improving Big Game Winter Habitat on the San Juan National Forest (CO)
\$150,000

Ducks Unlimited

Restore Platte River Wetlands Habitat to Benefit Ducks, Geese and Waterbirds (CO)
\$273,000

Southern Plains Land Trust

Modifying Fences on Private Ranches to Improve Wildlife Connectivity through Grassland Habitat (CO)
\$216,000

State of Colorado Department of Natural Resources

Improving Big Game Winter Range and Restoring Sagebrush Habitat (CO)
\$250,000

Tamarisk Coalition

Removing Invasive Tamarisk and Russian Olive to Restore Habitat for Endangered Fish and Birds (CO)
\$128,000

U.S. Fish and Wildlife Service – Colorado Partners for Fish and Wildlife

Removing Invasive Conifer to Restore Sagebrush Habitat (CO)
\$100,000

Wildlands Restoration Volunteers

Restoring Mesic Meadow and Sagebrush Habitat for Greater Sage-Grouse and Big Game Species (CO)
\$238,700

2021

Central Colorado Conservancy

Restoring Riparian and Wetland Habitat to Benefit Trout Spawning in Badger Creek (CO)
\$390,100

Colorado Open Lands

Restoring Riparian and Wetland Hydrology and Species Habitat in the South Platte Headwaters (CO)
\$131,800

Conservation Legacy

Removing Invasive Tamarisk to Restore Riparian Habitat and Instream flow (CO)
\$242,700

Mesa County Land Conservancy

Restoring Riparian and Upland Habitat in the Little Dolores River Watershed (CO)
\$381,000

Montezuma Land Conservancy

Restoring Sagebrush Shrubland for Sage-Grouse and Big Game Habitat in Dolores and San Miguel (CO)
\$275,600

National Audubon Society

Increasing Strategic Ranch Enrollment in the Audubon Conservation Ranching Program (CO)
\$317,700

National Forest Foundation

Improving Habitat and Reducing Wildfire Risk by Treating Railroad Bridge Forestland (CO)
\$452,600

Summit County Government

Restoring Riparian and Upland Habitat on Swan River to Improve Connectivity for Cutthroat Trout (CO)
\$300,000

Trout Unlimited

Restore Riparian Habitat and Connectivity on the Colorado River around the Windy Gap Reservoir (CO)
\$225,500

Trout Unlimited

Restoring Riparian and Upland Habitat in the Tomichi Creek Watershed (CO)
\$299,700

2022

Backcountry Hunters & Anglers

Removing Derelict Fencing to Increase Habitat Connectivity for Big Game (CO)
\$99,500

Colorado Cattlemen's Association

Increasing Grassland Resilience and Productivity through Improved Grazing Management (CO)
\$413,100

Colorado Department of Transportation

Increasing Habitat Connectivity and Driver Safety with Wildlife Underpasses on US Highway 160 (CO)
\$337,500

Colorado Rio Grande Restoration Foundation

Restoring Riparian Habitat along the Rio Grande in the Alamosa National Wildlife Refuge (CO)
\$258,000

Costilla County

Restoring Riparian and Upland Habitat in the Rio Grande Natural Area (CO)
\$275,000

Ducks Unlimited

Improving Habitat and Public Access to the Grand Valley Wetland (CO)
\$200,000

Jefferson Conservation District

Restoring Forest Habitat to Benefit Big Game Species on Private, Working Lands (CO)
\$100,000

Larimer County Natural Resources

Eradicating Annual Invasive Grasses to Improve Elk and Mule Deer Winter Range (CO)
\$328,900

Mountain Studies Institute

Restoring Riparian and Instream Habitat on Mancos River to Improve Connectivity for Native Fish (CO)
\$587,400

National Forest Foundation

Increasing Biodiversity and Reducing Fire Risk with Cross-Jurisdictional Forestland Restoration (CO)
\$305,700

Northern Colorado Water Conservancy District

Restoring Riparian and Mesic Habitat in the East Troublesome Fire Scar (CO)
\$300,000

Pheasants Forever

Eradicating Annual Invasives to Restore Native Grassland on Private Working Rangelands (CO)
\$103,100

The Mule Deer Foundation

Restoring Sagebrush Rangeland Habitat through a Conservation Partnership Coordinator (CO)
\$383,400

Weld County Weed Division

Eradicating Annual Invasives to Restore Native Grassland in Weld County (CO)
\$174,800

White River Conservation District

Improving Big Game Winter Range and Migration Routes by Removing Woody Invasives (CO)
\$238,900

2023

Backcountry Hunters & Anglers

Removing Barriers to Big Game Movement on Colorado's Western Slope (CO)
\$102,200

Bird Conservancy of the Rockies

Promoting Community-Level Conservation to Incentivize Private Land Stewardship (CO)
\$102,400

Board of Trustees of Eastern Illinois University

Restoring Shortgrass Prairie by Reintroducing Prairie Dogs and Black-Footed Ferrets (CO)
\$277,000

Colorado Open Lands

Restoring the Hydrology of the South Platte River (CO)
\$312,000



Mechanical removal of encroaching pinyon and juniper trees near Meeker, Colorado



Denver Zoological Foundation

Restoring Shortgrass Prairie and Riparian Areas in the Denver Metropolitan Area (CO)
\$330,400

Mesa County Land Conservancy

Restoring Floodplains and Mitigating Wildfire Risk Across Pinyon Mesa (CO)
\$387,900

National Audubon Society

Using Low-Tech Process-Based Restoration Techniques to Restore Dry Fork Creek (CO)
\$450,000

National Forest Foundation

Restoring Landscape Resiliency on Baldy Mountain (CO)
\$337,100

National Wildlife Federation

Reducing Disease Transmission to Bighorn Sheep and Improving Big Game Seasonal Range (CO)
\$203,200

Northern Colorado Water Conservancy District

Restoring the Kawuneeche Valley to Benefit Wetlands in the North Fork Colorado River Basin (CO)
\$300,000

The Nature Conservancy

Enhancing Hydrology of the Yampa River to Benefit Endangered and Threatened Fish (CO)
\$250,800

2024

Backcountry Hunters & Anglers

Implementing Virtual Fencing to Increase Efficiency in Rotational Grazing in Walden (CO)
\$187,000

City of Greeley

Improving planning and management of non-native plants in the Arroyos del Sol Natural Area (CO)
\$250,000

Ducks Unlimited

Restoring Front Range Urban Wetlands to Benefit Wildlife in Arvada (CO)
\$139,100

National Audubon Society

Restoring, Protecting and Expanding Grasslands through the Audubon Conservation Ranching program (CO)
\$444,600

Southern Plains Land Trust

Restoring Hydrological Connectivity and Creating a Climate-Resilient Watershed in Southeastern Colorado (CO)
\$217,500

Summit County

Advancing the Project Design for Three Wildlife Crossing Structures on I-70 (CO)
\$450,000

Trout Unlimited

Restoring Riparian Ecosystems in Arapahoe Roosevelt National Forest (CO)
\$514,400

Ute Mountain Ute Tribe

Increasing Capacity for the Ute Mountain Tribe on the Ground Projects to Benefit Wildlife Habitat (CO)
\$284,900

Western Landowners Alliance

Restoring Habitat for San Juan Cutthroat Trout in the Navajo-Blanco basin (CO)
\$346,700

Western Slope Conservation Center

Reconstructing the Diversion Dam and Headgate on the North Fork of the Gunnison River (CO)
\$235,900

Year One, Mile High Youth Corps

Establishing a Youth Crew to Remove and Improve Fencing in Priority Big Game Habitat (CO)
\$286,000

Yuma County Conservation District

Enhancing Habitat for Migratory Birds, Greater Prairie-Chicken and Mule Deer in Yuma County (CO)
\$320,000



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FRONT COVER

A young moose in Colorado

BACK COVER

Kawuneeche Valley-Rocky
Mountain National Park

