



**UTAH DEPARTMENT OF
NATURAL RESOURCES**

1594 West North Temple
Salt Lake City, Utah 84114



The Power of Proactive Conservation

*How recent partnerships and successes are keeping
Utah species off the Endangered Species List*

November 2018



DIRECTOR'S MESSAGE



IN UTAH, we care about wildlife. We work every day to keep populations thriving, to keep habitats healthy and to keep species from being listed under the Endangered Species Act (ESA). In recent decades, our efforts have seen many more successes than setbacks. Continued support — both political and financial — is necessary to maintain our remarkable track record of ESA-listing prevention.

Several programs at the Utah Department of Natural Resources (DNR) are committed to this effort and to proactive conservation. We're tackling the biggest issues from many different angles. With a combination of strategic programs, plans, projects and partnerships, we are:

- Strengthening wildlife populations and improving habitats
- Ensuring that species aren't listed as threatened or endangered under the ESA
- Recovering species that have been listed as threatened or endangered in the past
- Increasing water quality and yield to meet public and agricultural needs
- Improving watersheds and restoring landscapes affected by wildfires
- Balancing population growth and economic prosperity with wildlife conservation

To address many of Utah's wildlife-related efforts, we have a detailed Wildlife Action Plan. It focuses on the native species most in need of conservation. The plan pinpoints threats and crucial data gaps while providing strong, clear guidance for improving habitats and strengthening wildlife populations.

Other DNR programs that support the Wildlife Action Plan include the Watershed Restoration Initiative and the Office of Recovery Programs. They coordinate with numerous partners to help fund, plan and execute on-the-ground habitat and species-recovery projects. These projects protect and preserve Utah's unique natural resources, and help safeguard the quality of life that makes Utah so special.

Over the years, we've learned that working together is the true key to conservation effectiveness. We have collaborative, solution-based partnerships with universities, other state and federal agencies, local governments, conservation groups, private landowners and non-governmental organizations. None of the successes highlighted in this report would have been possible without the resources, engagement and unwavering support of our many partners.

While we have achieved remarkable results in the last few decades, we cannot afford to become complacent. To conserve Utah's wildlife — while planning for population growth and increasing economic prosperity — is a worthwhile challenge for all Utahns. I appreciate your ongoing support and encourage you to get involved. Now's the time to find a conservation project or effort that's meaningful to you and make a difference for wildlife!

A handwritten signature in blue ink that reads "Mike Styler". The signature is written in a cursive, flowing style.

Michael Styler

Executive Director

Utah Department of Natural Resources

Preventing ESA listings

Cooperative conservation measures are making a difference.

IN RECENT decades, programs within the Utah Department of Natural Resources have worked closely with many external partners to proactively conserve Utah's wildlife. One of the primary goals of these partnerships is to prevent the need for species listings under the

Endangered Species Act (ESA).

Species listed as threatened or endangered under the ESA often have extremely low population numbers, and their recovery can be difficult. A listing also increases the regulatory burdens that affect state and local communities.

During the last 25 years, 21 species with Utah populations have been petitioned for listing – some multiple times – but the vast majority have received “Not Warranted” decisions because of the state's effective partnerships and ongoing conservation efforts.

Utah's successes are the result of committed conservation partnerships that require people, funding, planning and support. These efforts are helping species in need, preventing additional ESA listings and demonstrating that even sensitive wildlife populations can persist alongside well-planned and carefully managed development.

SPECIES	USFWS DECISION	YEAR DECIDED
Southwestern willow flycatcher	Listed — Endangered	1995
Columbia spotted frog	Not warranted for ESA listing	2002
Yellowstone cutthroat trout	Not warranted for ESA listing	2006
Colorado River cutthroat trout	Not warranted for ESA listing	2007
Bonneville cutthroat trout	Not warranted for ESA listing	2008
Pygmy rabbit	Not warranted for ESA listing	2010
American pika	Not warranted for ESA listing	2010
Northern leopard frog	Not warranted for ESA listing	2011
Northern leatherside chub	Not warranted for ESA listing	2011
Gila monster	Not warranted for ESA listing	2011
American bison	Not warranted for ESA listing	2011
Gunnison's prairie dog	Not warranted for ESA listing	2013
Yellow-billed cuckoo (western DPS)	Listed — Threatened	2014
Gunnison sage-grouse	Listed — Threatened	2014
Least chub	Not warranted for ESA listing	2014
Greater sage-grouse	Not warranted for ESA listing	2015
Boreal toad	Not warranted for ESA listing	2017
Bifid duct pyrg	Not warranted for ESA listing	2017
White-tailed prairie dog	Not warranted for ESA listing	2017
Virgin River spinedace	Under review	Under review
Wolverine	Under review	Under review

Improving Stream Health

Beaver dam analogues improve water quality and quantity.

UTAH'S Watershed Restoration Initiative (WRI) is using relatively new structures — beaver dam analogues (BDAs) — to improve the health of streams and nearby habitats. A BDA mimics a beaver dam. It is essentially a small, temporary dam made without rock, concrete or heavy equipment. In some cases, land managers use BDAs as “starter dams” to prepare streams for beaver reintroduction, but they also use BDAs extensively in areas where there is no intent to reintroduce beavers.

A BDA is a fast, inexpensive and effective tool that can improve water quality and quantity, reduce fire risks and increase forage and browse. It also works well to reduce the threat of ESA listings for diverse fish and wildlife species. BDAs

can provide many benefits to watersheds and landowners, including:

- Increasing downstream water availability longer into the summer by slowing the descent of water in a watershed
- Improving downstream water quality by reducing sedimentation, nutrient loads and temperature
- Increasing and diversifying habitat for fish and wildlife by adding deeper, colder pools and by facilitating the growth of streamside plants

The broad adoption of BDAs has helped increase and improve seasonal and year-round habitats for many fish and wildlife species, including sage-grouse (brood rearing), songbirds (nesting), bats (foraging), leatherside chub and cutthroat trout (year-round).

Multiple WRI partners, including the U.S. Forest Service, private landowners, Bureau of Land Management and the Utah Division of Wildlife Resources (DWR) are installing BDAs on lands they own or manage. Partners who assist landowners — such as Trout Unlimited, the Utah Department of Agriculture and Food, Utah State University and the Natural Resource Conservation Service — are also contributing their expertise, materials and funding to these projects.

Below: DWR employees and Watershed Restoration Initiative partners construct a BDA.



Conserving boreal toads

Disease-resistant populations help prevent ESA listing.

THE eastern population of boreal toads lives in mountain ranges across Colorado, Wyoming, Montana and Utah. In November 2017, this species was found not warranted for protection under the ESA, largely because of conservation efforts completed in Utah. Some of the factors that contributed to this success included:

- Surveys and monitoring have documented that boreal toad populations remain strong in

most Utah mountain ranges.

- Populations in northern Utah appear to be more resistant to a widespread fungus-caused disease than some other populations, and they have persisted in spite of the fungus.
- Partners have completed key habitat projects – and more are underway – to protect boreal toad populations.
- A captive, back-up population has been established for Utah’s most at-risk boreal toad population.

Even though the 2017 decision ensured that boreal toads were not listed as threatened or endangered, biologists are still monitoring Utah populations and tracking toad sightings. If you see a boreal toad in the wild, please enter your information online in iNaturalist or email details about the sighting (e.g., location, date and GPS coordinates, if possible) to toads@utah.gov.

Below: Conservation efforts kept boreal toads from being listed under the ESA.



Navigating growth with information

Technology provides a way to fill critical information gaps.

UTAH is experiencing tremendous growth. Current projections indicate that the state's population will nearly double between now and the year 2060.*

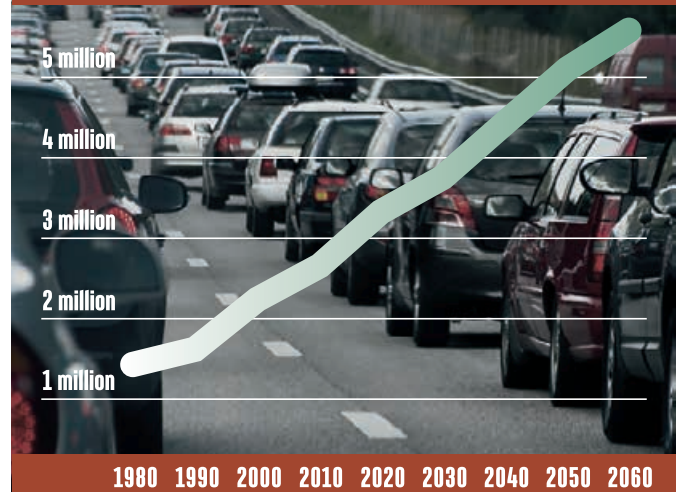
This rapid growth will place substantial demands on Utah's infrastructure and natural resources. Advanced planning and strategic decision-making are necessary to ensure a healthy balance for Utah's wildlife and their habitats in the years to come.

Utah's current regulatory processes require an environmental review of development proposals but do so in a manner that remains friendly to growth and business.

The environmental-review process is information driven. It uses partner-collected data to help guide development proposals. Many of Utah's conservation-focused partners have collected a large amount of data, though, which can sometimes make it challenging to access, analyze and use effectively.

To overcome this challenge, the Utah Division of Wildlife Resources (DWR) is working to consolidate its wildlife data – along with agency and partner data – into an integrated system. The

Utah population



first project completed in this system included a user data-entry portal and query tool for bat and raptor species across Utah. This platform will provide the DWR and its partners access to organized, reliable data and the tools needed to collect and assess the quality of new data.

“Advanced planning and strategic decision-making are necessary to ensure a healthy balance for Utah's wildlife and their habitats in the years to come.”

The next step will be to make species distribution models from raw data that will be easily accessible and provide developers with authoritative information about species of concern.

*2018 Economic Report to the Governor, Utah Economic Council

Working together to recover Utah species

Some species are already on track for delisting.

IN OCTOBER 2018, the U.S. Fish and Wildlife Service (USFWS) announced that it was proposing to delist Deseret milkvetch, a native Utah plant that had been listed as threatened under the ESA since 1999. The proposal to delist would not have happened without the contributions of the following group of dedicated partners:

- Central Utah Water Conservancy District
- U.S. Bureau of Land Management
- U.S. Bureau of Reclamation
- U.S. Department of Interior
- U.S. Fish and Wildlife Service
- Utah Department of Natural Resources
(includes the Office of Recovery Programs, which administers Utah's Endangered Species Mitigation Fund)

- Utah Reclamation Mitigation and Conservation Commission

Delisting history and implications

At the request of Utah's Office of Recovery Programs, the partners first began meeting in 2015 to consider a joint downlisting/delisting effort for all relevant Utah plants and wildlife. (Downlisting is the reclassification from endangered to threatened, while delisting is the removal of a species from the Federal List of Endangered and Threatened Wildlife and Plants.) For some species, a change in circumstances — or new information that was not available at the time of listing — may provide support for delisting or downlisting consideration.

After more than a year of meetings and numerous discussions, the partners finally concluded in the fall of 2016 that five Utah species (a fish, a snail and three plants) were ready to consider for delisting or downlisting:

- Deseret milkvetch (plant)
- Heliotrope milkvetch (plant)
- June sucker (fish)
- Kanab Ambersnail (snail)
- Ute ladies' tresses (plant)

Although it took a few years for the proposal to delist the Deseret milkvetch to work its way through the USFWS system, the fact that the delisting process is finally occurring provides confirmation to partners that their investments in recovery have not been in vain. Delistings or downlistings for other Utah species are now within reach and will be remarkable conservation milestones. Ongoing political and budgetary support for this effort is critical to its future success.



The U.S. Fish and Wildlife Service has proposed delisting Utah's native Desert milkvetch.



Once numbering fewer than 1,000 fish, there are now tens of thousands of June suckers in Utah Lake.

Protecting Utah prairie dog habitat

Recent property acquisition helps partners conserve prairie dogs and other wildlife.

THE Utah prairie dog, listed as federally threatened since 1984, has experienced tremendous population growth over the last decade. The majority of that increase – approximately 75 percent – has occurred on private lands within Iron County. At the same time, the human population of Iron County has boomed, even outpacing Utah’s high statewide growth rate. This increase in both prairie dogs and humans has resulted in conflict.

Although private lands constitute only 28 percent of Iron County, those lands have most of the habitat that prairie dogs prefer, which includes deep soil for burrowing. In 2012, a coalition of county, state, federal and private partners began searching for potential private lands that contained suitable prairie dog habitat.

In May 2018, Iron County acquired a 291-acre property – from a private seller – that included valuable habitat for the threatened Utah prairie dog. The U.S. Fish and Wildlife Service, the State of Utah (in particular, the

DNR’s Office of Recovery Programs) and The Nature Conservancy (TNC) jointly provided the \$1 million needed for the property acquisition.

The county now holds title to the property, and TNC retains a conservation easement. Utah prairie dogs currently occupy the land and, in the coming years, their populations will grow as other prairie dogs are relocated from the county’s unprotected areas. The Utah Division of Wildlife Resources (DWR) will monitor the prairie dog populations on the property and will perform necessary habitat improvement and maintenance.

Under the Utah Prairie Dog Revised Recovery Plan, establishment of prairie dog populations on public lands – and on protected private lands – is crucial to the continued viability, eventual recovery and local public tolerance of the species. This recent acquisition will help increase Utah prairie dog populations on protected private land within Iron County.

This property acquisition is already helping

“ This property acquisition is already helping Utah prairie dogs, and it will benefit mule deer and pronghorn in the near future. ”

Utah prairie dogs, and it will benefit mule deer and pronghorn in the near future. It also provides potential habitat for burrowing owls. The new property borders other public lands owned by the DWR and the Bureau of Land Management, ensuring a large, connected block of protected wildlife habitat.

Weber River fish habitat

Partners are reconnecting migratory corridors to reverse declines in fish populations.

BONNEVILLE CUTTHROAT trout and bluehead suckers live throughout the Weber River watershed. Populations of both species are declining in this area, and fisheries biologists have identified habitat fragmentation as one of the major causes.

Members of Trout Unlimited recently completed a barrier assessment in the Weber River drainage, and they identified more than 400 road crossings, utility crossings, irrigation diversions and other obstacles that can limit or prevent fish movement. The cutthroat trout and bluehead suckers have specific spawning, rearing and overwintering requirements that occur in different parts of the river. Both species must migrate to fulfill all the needs of their lifecycles.

Fragmentation isn't just a fish habitat issue. Many water users and conservationists who care about the Weber River watershed have historically not communicated with each another. The recent formation of the Weber River Partnership has worked to bridge those gaps by facilitating discussions among watershed partners. This improved dialogue has allowed the Utah Division of Wildlife Resources and its partners to effectively spread the message about fragmentation and begin the work to reconnect critical habitats.

Partners have already restored fish passage at

several of the river's larger diversions and within many tributaries. The result has been significantly improved movement by both species. The recent re-licensing of the Weber River PacifiCorp hydroelectric facility is another example of how these partnerships are improving habitat for fish in the Weber River. A fisheries workgroup convened as part of the re-licensing process, and the group recommended a fish ladder at the hydroelectric facility. PacifiCorp carried this recommendation forward in its Federal Energy Regulatory Commission re-licensing package.

New partnerships among river advocates, businesses, conservation groups, government agencies and other organizations are already making a difference for the Weber River and its fish.



Bonneville cutthroat trout



Bluehead sucker

Upper Kanab Creek Restoration

A diverse partnership restores a watershed and addresses threats to species.

THE Upper Kanab Creek watershed supports a wide variety of wildlife species. Those species have faced threats to their health and habitats in recent years, so a diverse partnership formed to address the problems. While the partners have primarily

focused on the boreal toad and Bonneville cutthroat trout, many other species—including mule deer and the American beaver—have benefited from their work.

To reduce the threat that fungus-related disease posed to boreal toad populations, numerous partners established adult toad populations in their zoos and hatcheries. They have provided captive, back-up colonies, and also reared toads to release in the wild. This work would not have been possible without key zoo, aquarium and hatchery partners in Utah, Colorado and Nebraska.

Utah's Watershed Restoration Initiative partners have used beaver dam analogues, streamside fencing and aspen-regeneration activities to help restore aquatic habitat. The work has enhanced woody plant growth and increased pond habitat, which may increase the likelihood of successful beaver reintroduction in the area. Boreal toads and Bonneville cutthroat trout have also seen benefits as improved water storage and habitat address the threats of

Fish-passage barriers on Upper Kanab Creek reduce the threat of non-native fish returning.



drought and limit harmful changes in the natural systems.

Rotenone treatments and fish-passage barriers were also completed in 2017 and 2018 on Upper Kanab Creek and Blubber Creek to remove the threat of non-native fish. In October 2018, the

“ While the partners have primarily focused on the boreal toad and Bonneville cutthroat trout, many other species – including mule deer and the American beaver – have benefited from their work. ”

Utah Division of Wildlife Resources partnered with the U.S. Forest Service and a local chapter of Trout Unlimited to restore Bonneville cutthroat trout to Upper Kanab Creek. The restoration crew used electrofishing to collect fish from Deep Creek on Mt. Dutton, backpacked down the mountain with buckets to a hatchery truck and then transplanted the fish to Upper Kanab Creek.

Large, complex watershed projects like this one require help from many partners, including conservation organizations, livestock permittees, project development staff, the line officers who sign off on documentation and the administrators who provide support. The U.S. Forest Service, in particular, was instrumental in securing clearance for on-the-ground work and, in many instances, provided the supplemental personnel needed to complete critical projects.



Preparing for the future

We can overcome challenges with effective partnerships and secure funding.

WE'VE HIGHLIGHTED just a few of the many ways we work with our partners to achieve successful outcomes for wildlife and their habitats. In recent decades, we have prevented 18 wildlife species (out of 21 petitioned) from being listed under the Endangered Species Act (ESA). This 86 percent success rate translates to real-world benefits.

By preventing the need for most ESA listings, we have preserved considerable economic activity, limited federal oversight and saved the people of Utah countless hours – and hundreds of millions of dollars – that would have otherwise been spent on ESA regulatory compliance.

Despite this success, we cannot afford to become complacent. What was adequate in the past will not be adequate in the future. The scope of emerging and future challenges exceeds those we have recently overcome, and we lack the capacity to meet all of them successfully.

Utah's growth projections show our population doubling in the next few decades, which will drive an increased need for

resources and infrastructure. Development of private lands will continue and demands on public land will increase. Wildlife are renewable resources if managed wisely, while other resources – like open space and water supply – are finite. Utah's ongoing drought conditions, changes in precipitation and declining snowpack also pose serious challenges.

The scope of work required to proactively conserve Utah's wildlife, avoid additional ESA listings and recover species already listed is far beyond the capacity of any single organization. It requires collaborative, creative, solution-based partnerships, which is an area where we have a solid track record.

A secure and adequate funding base is also required if we are to continue to be an effective

“ Continued support – both political and financial – is necessary to maintain our success record of ESA-listing prevention. ”

partner. Currently, there is no dedicated, secure source of federal funding for this type of work, although some members of Congress have recognized the need and are seeking a solution. The State of Utah has a dedicated funding source, but its last increase was in 1997.

To continue our work to prevent ESA listings, we need a strong workforce. We need the ability to increase and retain staffing commensurate with continued economic development and population growth. Continued support – both political and financial – is necessary to maintain our success record of ESA-listing prevention.





Watershed Restoration Initiative

Contact Tyler Thompson or see <https://watershed.utah.gov/>

Office of Recovery Programs

Contact Paul Thompson or see <https://esmf.utah.gov/esmf/>

Wildlife Action Plan

Contact Jimi Gragg or see <https://wildlife.utah.gov/learn-more/wap2015.html>