

protecting and restoring

Colorado's

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and their

watersheds





#### **Our Mission**

To Conserve,
Protect, and
Restore
Colorado's
Coldwater
Fisheries and their
Watersheds.

## We Get Things Done:

We conserve Colorado's fisheries using four key tactics:

Collaboration. TU brings stakeholders together in partnership to achieve common goals. We develop projects with landowners and irrigators, often resolving diverse and opposing interests.

#### Focus and Persistence.

TU has the staying power to deliver results through multi-year efforts. Long-term campaigns helped secure protections for the Roan Plateau and launch the Learning by Doing partnership for the Colorado headwaters.

Leverage. TU multiplies donor funds and our 12,000 members' sweat equity through grants from federal, state and foundation sources. Every dollar goes further for conservation.

#### Reliance on Science.

TU builds programs on a foundation of solid science and data monitoring. Good research guides restoration designs and river advocacy.

## A Letter From the President

Thoreau is quoted as saying "Many go fishing all their lives without knowing that it is not fish they are after." In my experience, there is much truth in this statement, but I believe most of the members, volunteers, staff and partners that make up the Trout Unlimited (TU) family understand that conserving, protecting and restoring our coldwater fisheries is vitally important for reasons that go far beyond catching fish.

I am extremely proud of the accomplishments of TU in Colorado in 2017. Take for example our work on the Fraser River in Grand County. The Fraser is imperiled due to significant diversion of its volume for municipal use. TU is in the midst of a long-term, collaborative effort to protect and restore this crucial tributary to the Upper Colorado River. In 2017, TU and other stakeholders completed an initial habitat enhancement project that, in just a few months, already has resulted in dramatic improvement to the aquatic health of the river. The fight to "Save the Fraser" will continue, and TU will be there to lead the charge!

Last year TU placed increased emphasis on restoring native trout populations in a number of parts of Colorado. The stories of TU's native trout restoration and reintroduction efforts spotlighted in the following pages are truly remarkable. Native trout are beautiful and rare. They live in picturesque and sensitive places. For these reasons and many others, native trout deserve our attention and support. I like to refer to TU's native trout recovery efforts as "practicing resurrection" (to borrow a phrase from Wendell Berry), and I am honored to be associated with an organization doing this important work.

In 2017 we faced new efforts from the Trump Administration to rescind or reduce protections associated with various national monuments, including Browns Canyon National Monument. TU, working with its partners and other stakeholders, quickly and successfully mobilized against this shortsighted proposal. This experience illustrates that we must continue to be vigilant when it comes to preserving public lands. In Colorado, we are fortunate to have millions of acres of public land available for hunters, anglers and other outdoor enthusiasts to enjoy. Every single acre of public land in Colorado matters. TU and its roughly 12,000 Colorado members are committed to vigorously opposing threats to our public lands.



To all of the TU members who faithfully renew your memberships each year, thank you! Please know that your dues and contributions are being put to good use. A particular "shout out" and thank you to our expanding group of River Stewardship Council members in Colorado! Your contributions and donations are significant and greatly appreciated. A growing number of corporate partners also deserve a big thank you. For example, TU in Colorado could not sustain its planned youth education programs and initiatives without the financial commitment of Suncor Energy. Conserving and protecting the places we love to fish in Colorado would be much more challenging without the generous support of Colorado businesses such as Upslope Brewing Company, Trout's Fly Fishing, Anglers All and RepYourWater.

TU's mission is to conserve, protect and restore Colorado's coldwater fisheries and watersheds. In simple terms, however, TU's mission is to make Colorado a better place to live. Like many of you, I love to catch trout and I love the places in Colorado where trout are found. For me though, it may be enough just to know that trout are out there, swimming in our waters—due in no small part to the ongoing efforts of Trout Unlimited.

Tight lines and wet feet,

Cam Chandler Colorado TU President







#### Colorado TU Chapters

- 1 Alpine Anglers
   Estes Park
- 2 Boulder Flycasters
   Boulder
- 3 Cherry Creek Anglers
   Aurora
- 4 Cheyenne Mountain

   Colorado Springs
- 5 Collegiate Peaks
- Salida/Buena Vista
- 6 Colorado River Headwaters
  - Grand County
- 7 Cutthroat Littleton
- 8 Denver

- Dolores River AnglersCortez
- 10 Eagle Valley Eagle
- 11 Evergreen
- Ferdinand Hayden
   Aspen/Glenwood Springs
- 13 Five Rivers
   Durango
- 14 Gore Range
  - Summit County
- 15 Grand Valley Anglers
   Grand Junction
- Gunnison Angling Society

   Gunnison

- 17 Gunnison Gorge Anglers
   Delta/Montrose
- Purgatoire River Anglers Trinidad
- 19 Rocky Mountain Flycasters
   Fort Collins/Greeley
- 20 San Luis Valley Alamosa
- 21 Southern Colorado Greenbacks
  - Pueblo
- 22 St. Vrain Anglers
  - Longmont
- West Denver
   Lakewood
- 24 Yampa Valley Flyfishers
  - Steamboat Springs

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#### Defending Our Public Lands

#### Introducing Colorado Public Lands Day

What makes Colorado special? In part, it's our millions of acres of public lands, which give Colorado anglers and sportsmen access to a vast world of outdoor experiences. In 2016, TU and other public land supporters helped Colorado become the first state in the nation to create a Public Lands Day, recognizing the importance of some 24 million acres managed by the federal government land management agencies.

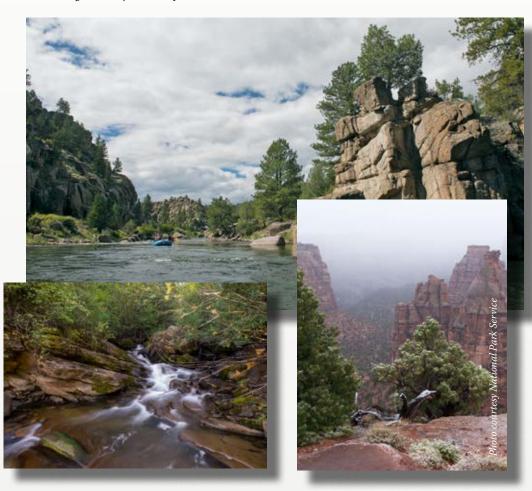
On May 20, 2017, Colorado celebrated its first ever Public Lands Day. Trout Unlimited staff, members and supporters, anglers and sportsmen, and other supporters of our public lands celebrated Colorado's magnificent public lands, with over 450 Instagram posts, 265 tweets and numerous emails demonstrating strong support and love for public lands. Many pictures of trout caught on public lands were sent in and shared with Senators Gardner and Bennet.

#### Defending Colorado's National Monuments

In late April, President Trump issued an Executive Order calling for a review of twenty-seven national monuments and ordering the Secretary of the Interior Ryan Zinke to provide recommendations that could include rescinding monument protections, reducing the size of monuments, or changes to how monuments are managed. In Colorado, the order specifically called out one monument, Canyons of the Ancients, but left the door for Browns Canyon to also be included in the review.

TU and our partners launched an all-hands-on-deck effort during the 60-day comment period to make

sure that the Administration heard loud and clear that Colorado sportsmen and women support national monuments and want to see them protected. These efforts resulted in nearly 300 high-value comments in support of Browns Canyon National Monument and the irreplaceable fishery in the upper Arkansas River. Colorado's legislators also stepped up—Sen. Bennet, Sen. Gardner, and Rep. Tipton all weighed in with support for Colorado's monuments. The team effort was successful and the final report issued by Secretary Zinke did not recommend changes to any national monuments in Colorado.





#### Oil, Colorado River Headwaters Don't Mix

After BLM announced plans to lease oil and gas in Grand County near the headwaters of the Colorado River, alarm bells went off at TU. The proposed lease site was located within several miles of Rocky Mountain National Park near the headwaters of the Colorado River, in a county that has no active oil and gas wells but is dependent on tourism, agriculture and healthy waters and habitat.

Make sense? TU didn't think so either. Tyler Baskfield, TU's northern Colorado field coordinator, went to work mobilizing community leaders, sportsmen and other conservation groups to oppose the proposed lease sale. After hearing the strong concerns from local governments, guest ranches, sportsmen and other community members, BLM backed off, removing 20 parcels covering some 27,529 acres in the county from consideration for leasing.

#### A Travel Plan for the Dolores

While the work isn't glamorous, there's good reason TU staff have invested countless hours in shaping travel management plans for our national forest roads and trails. These plans identify sensitive backcountry watersheds and fisheries that need to be protected.

The Rico West Dolores Travel management plan was released in late 2017 as a draft record of decision. This travel plan is the result of years of environmental study, public comment and lawsuit-driven delays. But the hard work has paid off—the preliminary plan imposes significant new restrictions on motorized travel in the national forest and protects key fish and wildlife habitats

in the area north of Dolores, including Bear Creek, Taylor Mesa, Calico National Recreation Trail, Bolam Pass, Divide Road and Groundhog Point.

Notably, the preferred alternative restricts motorized use on the Little Bear trail and most of the main Bear Creek trail, including the lower portion. Closing Bear Creek to motorized use will help avoid potential conflicts with outdoor users including hikers, cyclists, anglers, hunters, equestrians and outfitters.

By managing travel, TU is advancing conservation in our national forests.





"Access to and conservation of our public lands and water resources are critical to healthy and sustainable fisheries in the Rocky Mountain region. When we have such a short time frame to develop our youth-access to a healthy fishery is what will set the hook in the next generation as they enjoy catching fish and ultimately become the stewards of the resource."

Alex Woodruff, RSC donor

#### Keeping South Park Special

South Park is a special place, with world-class trout streams, wildlife and abundant natural resources deserving vigilant protection. That's why TU is working to ensure that any proposed energy development in the area is done in a balanced, careful way. In 2017, TU staff, with our partners at the Colorado Wildlife Federation, continued to lead sportsmen engagement in the Royal Gorge Resource Management Plan (RMP). Sportsmen are working closely with the BLM and other local stakeholders to craft a responsible leasing plan for the South Park area that identifies high-value natural areas unsuitable for development and ensures early, meaningful public input in any oil and gas leasing decisions.

TU developed a strong set of recommendations to protect key fish and wildlife habitats in South Park—and the Draft RMP and Environmental Impact Statement issued in April 2017 reflected most of those recommendations.



#### A Community Vision for Gunnison Public Lands

Garrett Hanks, TU's Southwest
Colorado field coordinator, took
part in a unique community
collaboration in the Gunnison
area, led by Sen. Michael Bennet
that asked local citizens and
business leaders, sportsmen
groups and others to work
together on a vision for how
to make the best use of their
area's national public lands and

As part of the process, TU developed an ambitious conservation proposal, including significant wilderness additions and protections for high-quality fish and wildlife habitat, that was adopted by the working group. In the coming year, TU will continue to push for this strong conservation vision through both the community collaborative and the upcoming forest planning process for the Grand Mesa, Uncompahgre and Gunnison national forests.



#### **Protecting** & Restoring **Rivers**

#### Colorado Water Plan -**Bringing Everyone to the Table**

What level of minimal flows does a stretch of river or stream need to remain healthy and fish-friendly? How can all the diverse users of a watershed—from ranchers and farmers to anglers and municipal users—collaborate to ensure the best management of those finite water

resources?

Those are the kind of essential questions that a new state tool-Stream Management Plans (SMPs)are designed to answer. And everyone benefits from having those answers, including anglers.

In 2017, TU played a critical role in organizing SMPs for various watersheds across the state.

As first conceived by the Colorado

Water Conservation Board, Stream Management Plans aim to identify essential environmental and recreational flow needs for "priority" stream reaches, with an eye to improving flows and habitat through collaborative water management with other water users.

Trout Unlimited strongly supported the concept of SMPs throughout the evolution of the Colorado Water Plan—recognizing that SMPs are a natural extension of our ongoing partnerships with ranchers and farmers to improve river health and maintain agriculture's crucial role in our rural communities.

"Most of the water in the state is controlled by agriculture," notes Richard Van Gytenbeek, TU's Upper Colorado River Basin coordinator. "For stream management plans to be successful, we need to bring agriculture producers and irrigation companies to the table."

TU staff are currently assisting stream management plans in several Colorado subbasins, including the Colorado, Uncompangre, Gunnison, San Miguel, San Juan and Rio Grande. Each of them are evolving differently and reflect the unique character of their own basin water use priorities.

"These collaborative efforts can reveal opportunities that not only benefit our local fisheries but also local agriculture and communities," says Van Gytenbeek. "We all depend on our home waters." 📕

#### TU, State Secure Poudre River **Protections Under NISP**

Working closely with Northern Water and Colorado Parks and Wildlife (CPW), Colorado TU and the Rocky Mountain Flycasters Chapter worked to ensure strong baseline protections for fisheries in the Cache la Poudre under the proposed Northern Integrated Supply Project (NISP). The state adopted Fish and Wildlife Mitigation

and Enhancement Plans for the project that reflected several TU recommendations. The plans do not represent endorsement of the NISP project itself, but rather define state recommendations for reasonable mitigation measures and possible enhancements to protect fish and wildlife should the project be constructed.

The NISP project, proposed by Northern Water, consists of two off-channel reservoirs: Glade Reservoir, northwest of Fort Collins, and Galeton Reservoir northeast of Greeley. It uses inbasin water, including the Grey Mountain project water rights that were once proposed for a mainstem reservoir in the Poudre Canyon.

The Mitigation & Enhancement Plans include measures to improve river habitat, restore fish passage, and provide streamflows—both minimum and higher flushing flows.

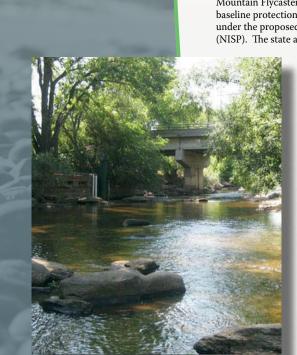
"This is only the first step of several reviews that NISP must address and there are too many unanswered questions for us to yet support or oppose the project itself," said CTU Executive Director David Nickum, "But we are pleased that these plans will assure a minimum base of protection for the Poudre's fisheries should

the project be constructed. We thank Colorado Parks and Wildlife staff for their diligence and Northern Water for their responsiveness to our and CPW's recommendations."

Low-flow protections are of particular importance for the Poudre's trout fisheries from the canyon mouth through Fort Collins. "The program is significant to the fishery and aquatic life because it keeps water in the river on a year-round basis," said CPW biologist Ken Kehmeier.

#### **River Benefits of the NISP** Mitigation & Enhancement Plan

- Improve minimum stream flows for 12-mile reach of the Poudre through Ft. Collins
- · Restore fish passage and natural sediment transport at 4 diversion structures along Poudre
- •Improve 2.4 miles of river habitat
- Invest \$5 million in other cooperative habitat projects
- Provide flushing flows, ranging across wet/dry periods
- Keep flow changes gradual with ramping rates to protect fish from rapid flow changes
- Monitor river habitats and adjust mitigation and enhancement measures as needed.



#### Chapter Spotlight: Colorado River Headwaters TU (Grand County)

#### Fish Are Returning to Fraser Flats

Harvested

four bundles per bucket. Each planted

bundle will

create a new willow tree

For years, the Fraser River, a key tributary of the Upper Colorado, had been degraded by municipal water diversions and other pressures.

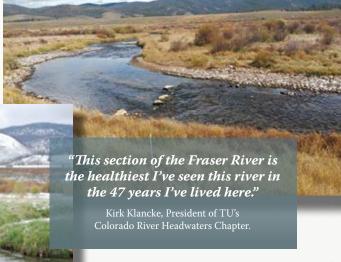
TU and a host of water stakeholders joined forces to reverse that decline. The effort, called Learning by Doing, brought together a variety of partners including Denver Water, Northern Water, Grand County, Trout Unlimited, and Colorado Parks and Wildlife to help restore the Upper Colorado watershed.

In 2017, the group broke

ground on an inaugural project at Fraser Flats, a stretch of the Fraser between the towns of Tabernash and Fraser, with the goal of restoring healthy habitat for trout even during periods of reduced flows. The Fraser in

this section had become too wide and shallow, resulting in sedimentation and high temperatures that smothered bug life and pressured coldwater-loving trout.

Design work began in fall 2016. In late spring, more than 150 volunteers turned out to plant willows and cottonwoods along the streambank for shade and bank stability. Then in summer and fall, the group brought in Freestone Aquatics to narrow the river with point bars



and other structures to increase velocity and depth of the river. Freestone also created a series of riffles and deep pools to provide better holding water for trout.

The results already have been nothing short of spectacular.

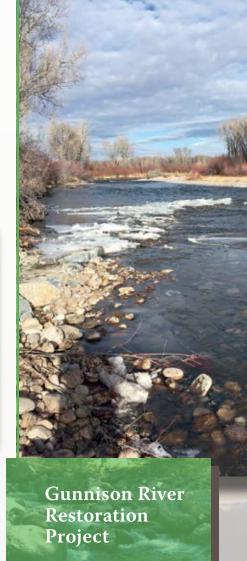
Colorado Parks and Wildlife conducted a fish survey on Oct. 5, shortly after completion of the project, and found a dramatic and almost immediate increase in the number and size of brown and rainbow trout in the stretch compared to previous surveys. Biologists also reported seeing large brown trout actively spawning in many areas of the stretch. In short, Fraser River trout have wasted no time moving into the improved habitat.

What's more, starting in spring 2018, the project will also provide public fishing access along a half-mile of the Fraser Flats section.

"The best part is we're hoping to do more river improvements like this in the future with our Learning By Doing partners," said Kirk Klancke, President of TU's Colorado River Headwaters Chapter.

The Fraser Flats project is the start of a long lasting collaborative agreement with river stakeholders that will ensure that the health of the Upper Colorado watershed remains at the forefront.





In November 2017, the City of Gunnison and Colorado Parks and Wildlife began construction on the Gunnison River Restoration Project. This project will improve channel stability, boater safety, and trout habitat on a very popular 3-mile segment of the Gunnison River, near the town of Gunnison. Gunnison Angling Society (GAS), Trout Unlimited's Gunnison Chapter, has helped develop this project during the last three years. GAS has directed over \$50,000 for construction of in-channel improvements and committed over 100 hours of volunteer labor toward the project. The project is expected to be completed in 2018.

#### Restoring Native Trout

#### Chapter Spotlight: San Luis Valley TU (Alamosa)

#### **Restoring Native Trout Habitat on Jim Creek**

In 2014, Trout Unlimited and Conejos County, with funding from Great Outdoors Colorado, embarked on an ambitious project to protect 3.5 miles of Jim Creek, which is home to a conservation population of

native Rio Grande cutthroat trout. This first phase of the project involved quality fish habitat.

Historic overgrazing had created an over-wide channel with denuded banks susceptible to erosion and braiding caused by cattle trailing and bank trampling. As the stream widened, it lost the energy required to build and maintain pools, resulting in long sections of very shallow water essentially devoid of pool habitat. In addition, there were sections with cut bank erosion

> Stabilized with new floodplain

oank and naintain

This fence line photo clearly shows the effect of the riparian fence from only one growing season.

> installing and repairing fencing to keep cattle out of the stream and rest a long-overgrazed

section of state land. It also catapulted a long-term stewardship program undertaken by TU's San Luis Valley Chapter to help the State Land Board and grazing lessees maintain fences in a very remote watershed.

In 2017, Trout Unlimited received grant funding for stream restoration on the protected parcel from the San Luis Valley Conservation and Connection Initiative (LOR Foundation), with help from a \$7,500 in-cash match put forth by Colorado Trout Unlimited with funds raised by the Rocky Mountain Flyathlon. The project, completed in October 2017, restored fish habitat on a half-mile of Jim Creek using on-site materials and innovative techniques to reestablish a healthy functioning stream channel and cutting off water supplies for riparian vegetation like sedges that stabilize banks with complex root masses.

The project restored proper stream function by repurposing on-site materials to narrow the channel and re-establish a single thread stream with a healthy pool to riffle ratio providing key habitat structures that offer cover and refuge in low flows. The restoration work was completed in October 2017, establishing 45 new pools and adding another 40-plus structures to stabilize banks and narrow the stream channel. The narrower channel will concentrate stream flows, creating the energy required to maintain pool scour and quality riffle habitat.

## **Bringing Back the Greenback**

In the summer of 2017, over 100 TU volunteers from 12 different chapters came together to support the recovery and reintroduction of the native Greenback Cutthroat Trout in the South Platte Basin. TU members worked alongside Colorado Parks and Wildlife (CPW) and US Forest Service (USFS) Staff to reduce erosion from public trails into Bear Creek, spawn fish in Zimmerman Lake, and backpack hundreds of Greenback fingerlings into Herman Gulch. In 2017, CPW stocked more than 12,000 fish into four different sites throughout the South Platte Basin - the bulk of them into Herman Gulch.

In the South Platte headwaters, TU also partnered with landowner (and fish passage engineer) Brent Mefford on design for barriers on Rock Creek and its tributary Black Canyon. Through a partnership with the US Fish and Wildlife Service, CPW, and USFS, this basin is on its way to providing a connected meta-population

for greenback recovery. The first of three barriers was constructed on Rock Creek in 2017, with an innovative design that will allow the barrier to be easily removed and reinstalled if needed—in order to connect habitat in the future, while isolating it when needed to protect against the spread of disease or non-native trout into the recovery area.

A key factor in the future success of Greenback recovery will be the ability of the fish to adapt to high-alpine environments and escape the current genetic bottleneck that is significantly affecting their overall survival rates. In the next few years, we will gain a better sense of the

trout's ability to adapt in their new surroundings.





#### Perseverance, Collaboration Produce Colorado's Largest-Ever Native Trout Recovery Project

Colorado TU, the U.S. Forest Service, and the Water Supply and Storage Company, a northern Colorado ditch company, settled litigation that will allow the company to continue to use Long Draw Reservoir on the Arapaho-



Roosevelt National Forests while also launching a largescale native trout restoration for the Cache la Poudre river headwaters.

The native trout restoration effort will take more than 10 years to complete but will ultimately provide for a connected "metapopulation" of trout spanning the

watershed across the headwaters including the Neota and Comanche Peaks Wilderness Areas, as well as in Rocky Mountain National Park. Including more than 40 miles of connected river and multiple lakes, as well as Long Draw Reservoir itself, the project represents Colorado's largest-ever native trout restoration effort.

Under the settlement, Water Supply and Storage Company has established a \$1.25 million trust to fund restoration efforts, with Colorado TU serving as the trustee. The project will include multiple permanent and

temporary barriers to help protect habitats from invasion by non-native trout, removal of current non-native trout populations, and restoration with Greenback cutthroat trout—the only trout native to the South Platte basin and Colorado's official state fish. Restoration work will be completed through collaboration among the USDA Forest Service, Rocky Mountain National Park, the U.S. Fish and Wildlife Service, Colorado Parks and Wildlife, and Colorado Trout Unlimited.

The agreement comes as the culmination of a more than 20-year effort by Trout Unlimited to ensure adequate mitigation for National Forest resources affected by the reservoir, which seasonally dries up La Poudre Pass Creek downstream. This long-term campaign has now produced an ambitious restoration effort that will provide a true stronghold for Colorado's native trout in a highly-protected watershed encompassing multiple wilderness areas. It also demonstrates the potential for positive results when diverse parties work cooperatively to seek solutions to challenging issues.

"The settlement is a great example of how open dialogue and a spirit of cooperation can yield conservation solutions," said David Nickum, Colorado TU Executive Director. "We are pleased that settlement efforts enabled all the parties to find a solution for the area's natural resources that meets federal stewardship responsibilities, respects the operating needs and challenges of long-standing water users, and achieves meaningful benefits for Colorado's environment and the millions of residents of and visitors to our state who enjoy it."

#### Abrams Creek: Keeping Natives Alive

Abrams Creek—a tiny stream outside of Gypsum—holds a rare population of native Colorado River cutthroat trout that's genetically unique and the only aboriginal trout population in the Eagle River watershed. And because Abrams Creek has a lower elevation than many cutthroat



streams, biologists say its native trout might be better adapted to warmer temperatures—another reason why this vulnerable fish population is important to preserve.

For more than a century, however, Abrams Creek has been dewatered by irrigation diversions that drastically reduce its flows in late summer and fall. The trout have been hanging on, but they're seriously pressured. Colorado Parks and Wildlife (CPW) has called this population the "highest priority" for

 $cut throat\ conservation\ efforts\ in\ Western\ Colorado.$ 

In 2016, Trout Unlimited's Mely Whiting helped negotiate a deal with the local irrigation company, Buckhorn Valley Metro District, which agreed to pipe

their irrigation ditch and thereby reduce leakage by 40 percent, with the water savings going back into the creek to keep the fish healthy. The biggest hurdle was money. Piping the irrigation ditch along several miles would cost more than \$1 million.

In 2017, that fundraising goal was achieved, thanks to efforts by TU, the Eagle Valley Chapter, Buckhorn Valley, CPW and the Eagle River Watershed Council, who secured grants from a variety of sources, including the Colorado Water Conservation Board, Colorado River Basin Roundtable, Bureau of Reclamation and the town of Gypsum, as well as donations from BLM, Colorado's Species Conservation Fund and local businesses Fortius Realty, NAI Mountain and Alpine Bank.

"Turns out, a lot of people were ready and willing to step up to protect this jewel of a stream," says Whiting. Because of these collective efforts, she says, the project is officially a go. Construction is expected to start in 2018 on piping the ditch, and the future of Abrams Creek cutthroats looks bright.



#### Cutthroats Returning to Hermosa Creek

Colorado River cutthroat trout restoration in Hermosa Creek reached an important milestone in November, with the completion of the final downstream barrier that will protect the upper watershed for reintroduction of native trout. Located a short distance below the East Fork's confluence with the mainstem of Hermosa Creek, the new barrier will allow for restoration within the final reaches of Hermosa Creek and ultimately create a contiguous reach of 23 miles of native trout habitat throughout the federally-designated Watershed Protection Area.

The work completed in 2017 builds on more than 25 years of collaborative restoration efforts among Colorado Parks and Wildlife, the San Juan National Forest, and the Five Rivers Chapter of TU in Durango. The new barrier will allow for Colorado River cutthroat to be returned to several additional stream miles downstream of previously installed barriers. Just as importantly, it will join the East Fork and mainstem drainages into one interconnected system supporting native trout—establishing the largest cutthroat trout stronghold in southwest Colorado. Partners in the Hermosa barrier project include Trout Unlimited, the US Forest Service, Colorado Parks and Wildlife, and the Trout and Salmon Foundation.



#### Building Partnerships on Water

#### Denver South Platte: A River Rising

1965 – South Platte flood devastates Denver

1975 – Chatfield Reservoir completed

2007 – First Carp Slam tournament held

2012 – Restoration project completed by Carson Nature Center

2014 – Army Corps of Engineers approves Chatfield Reallocation Project including environmental pool

2016 – Restoration projects completed at Florida-Overland, Grant-Frontier, South Suburban Park

2016 – Denver TU temperature monitoring launched

2017 – Pledges secured to expand Environmental Pool by 500 acre feet, with match from Denver Water

#### **Planned Future Efforts**

2018 – Denver TU coordinating Stream Management Plan to inform Environmental Pool management

2018 – Restoration planned for Marcy Gulch, Sheridan River Run, Confluence Park

2019 – Restoration planned for Elitch Gardens-Mile High and National Western

**2020** – Chatfield Reallocation Project & Environmental Pool to begin storing water

2021 – Restoration planned for Yale to Mississippi reach

#### Chapter Spotlight: Denver TU

#### **Restoring the Denver South Platte**

For more than a decade, the Denver Trout Unlimited chapter (DTU) has been working to improve the health of the Denver South Platte from Chatfield Reservoir through downtown Denver. Since the chapter's first "Carp Slam" tournament was held eleven years ago to build awareness of the Denver South Platte and its fishery potential, the restoration effort and partnerships have grown exponentially. DTU has worked with the City and County of Denver and the Greenway Foundation on a South Platte Restoration plan that lays out a multi-million-dollar restoration vision for the river and corridor all along the Denver South Platte.

members who have personally pledged funds to purchase an acre-foot themselves.

Along with contributing to the environmental pool, DTU is also spearheading a "Stream Management Plan" for the Denver South Platte—a science-based, stakeholder-driven process to understand the river's habitat and how the greatest environmental "bang for buck" can be achieved with the environmental pool releases. Through the study DTU, working closely with Colorado Parks and Wildlife, will help inform future decisions so that the river gets the greatest benefit possible.



## 'A River's Reckoning': Ranchers, TU Working to Restore a Great River

In 2017, Trout Unlimited and American Rivers finished production of "A River's Reckoning," a new film that tells the story of fifth-generation rancher Paul Bruchez's awakening to river conservation and his family's ranch legacy when drought and municipal water diversions deplete the Colorado River and threaten the ranch's operations. Paul and his family rise to meet these challenges, working with neighbors, conservation groups like Trout Unlimited and other partners to find creative



solutions that enhance their irrigation systems while restoring trout habitat in the Colorado River. It's an inspiring story of family, grit and stewardship—and it was selected to premiere at the prestigious Wild and Scenic Film Festival in January 2018. See the film at <a href="http://waterpartners.tu.org/">http://waterpartners.tu.org/</a>

Bruchez and his neighbors' group, ILVK, are working with TU on projects to install several innovative instream structures designed to provide adequate water levels for irrigation while also improving fish habitat. The project is part of a larger Colorado River vision, the Colorado River Headwaters Project, that includes the ILVK work, a new bypass around Windy Gap Reservoir to reconnect the Colorado River, and habitat restoration work below Windy Gap.

These projects, when fully implemented, will directly benefit more than 30 miles of the Colorado River and 4,500 acres of irrigated lands. It will also make available up to 11,000 acre-feet of water to improve the river during low-flow conditions. The partners got a major boost in late 2016 when the Department of Agriculture awarded the group a \$7.75 million grant for the project.

"What's happening on the upper Colorado shows that water users can work together to ensure river health while meeting diverse uses," said Drew Peternell, director of TU's Colorado Water and Habitat Project. "This project is a model of what cooperation and collaboration can achieve in meeting our water challenges in Colorado."

Key Headwaters Project partners include the ILVK, Northern Water Conservation District, Denver

Water, Colorado River Conservation District, Middle Park Soil Conservation District, Colorado Water Conservation Board, Grand County, Upper Colorado River Alliance, and Colorado Parks and Wildlife.



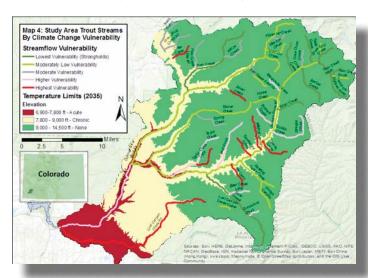
#### Chapter Spotlight: Dolores River Anglers (Cortez)

#### Angler Science in a Changing Climate

The Dolores River Anglers Chapter recently conducted a systematic analysis to understand the likely impact of climate change on coldwater fisheries and their watersheds. The "Coldwater Adaptive Management Framework," or CAMF, was developed to assess the chapter's home waters of the upper Dolores River watershed, lying at the intersection of high desert and high mountains. Through CAMF, the chapter recognized that major ecological changes were likely to occur to its trout fisheries and these impacts would likely increase through the end of the century.

CAMF is a decision-support framework meant to assist the development of more detailed watershed, subwatershed, and eventually stream-reach level planning. The focus is on identifying and managing long-term native and wild trout strongholds within the evolving context of climate change. Strongholds are those streams/reaches where habitat conditions are thought to be sufficiently resilient and resistant to withstand the substantial disturbances of climate change.

As a framework, CAMF can help guide resources directed at habitat improvement and public land use. By identifying strongholds, other areas with potential for restoration, and conversely those areas where climate change is likely to render streams inhabitable to trout, it can help in the prioritization of stream conservation efforts in the face of a warmer, more drought prone climate



The Dolores River Anglers are eager to share their experience with other basins. In 2017, staff from Colorado TU and National TU worked closely with the CAMF design team to identify opportunities to expand the program into other watersheds and stream planning efforts across Colorado. The team is currently developing a strategy to expand and pilot the program to other selected areas around the state in 2018.

CAMF is providing a scientifically-grounded approach to assessing long-term habitat protection and restoration under a changing climate.

# Partnering with Ag on System Conservation

In the last three years, Trout Unlimited staff in Colorado, Wyoming, and Utah have worked with agricultural producers in the Upper Colorado River Basin to facilitate enrollment in a groundbreaking water conservation program, the System Conservation Pilot Program (SCPP). Under the program, farmers and ranchers are compensated for conserving water that would otherwise be diverted from a stream and consumed by the irrigated crops. In many cases the water not diverted increases flows on trout streams that can be dewatered on below-average water years.



In 2017, Trout Unlimited submitted applications for SCPP funding on two watersheds in western Colorado, Tomichi Creek and the Cimarron River. Funding from the SCPP program for the Tomichi Creek conservation project will be combined with CWCB and private funds to develop a three-year water conservation program, beginning in April 2018 and ending in November 2020. The program will be initiated during the first below-average water year between 2018 and 2020. During implementation, participating water users would cease irrigation deliveries on July 1.

The water savings will improve environmental and recreational flows on 6 miles of Tomichi Creek, including through the Tomichi State Wildlife Area.

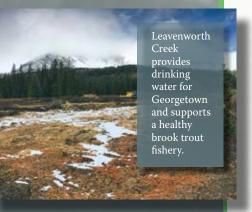
On the Cimarron River, implementing a water conservation project will provide insight into how water market strategy can help improve flows on a valuable coldwater trout fishery that is normally heavily impacted by diversions

Trout Unlimited believes that market-driven tools, like SCPP, that incentivize agricultural water conservation on a voluntary and temporary basis will help provide water for fisheries and the flexibility that water users will need as the Colorado River Basin continues to face shortages.

#### Reclaiming Mine-Impaired Streams

#### Leavenworth Creek

Abandoned mines have long impaired water quality on Leavenworth Creek in



the Clear Creek drainage upstream of Georgetown. Over the past several years, TU and project partners have been involved in reclamation work at the Santiago Mine and Mill located in the upper regions of the Leavenworth basin. This year, TU and our partners moved forward with further restoration in the basin to help improve water quality for the stream, its aquatic life, and downstream communities.

Efforts in 2017 included revegetation at the Santiago Mine and Mill site. These revegetation efforts aimed to stabilize soils and prevent erosion. TU and partners also worked extensively throughout the Leavenworth basin to remove tailings material from streamside areas, amend contaminated soils, consolidate braided channels and plant riparian vegetation. These efforts will reduce opportunities for heavy metal-laden materials to enter the waterway and contaminate Leavenworth Creek.

#### Lion Creek

Lion Creek and its tributary, North Empire Creek, contribute metal pollution from historic mines into the West Fork of Clear Creek, threatening both the resident trout fishery and several residential drinking wells. In 2016, TU removed tailings from the floodplain to help reduce this historic mining pollution. In 2017, TU, in partnership with the US Forest Service and US Geological Survey, conducted further assessments to investigate the remaining sources of contamination in

the watershed. After tracer injections at the Minnesota Mine shaft, the partners sampled downstream locations and found two seeps along Lion Creek that are contributing to downstream metal loading. Based on these results, work is planned for 2018 to divert adit flows around the flooded Minnesota Mine shaft to reduce water contamination, while further developing potential long-term treatment solutions for the mine.

#### Minnie Lynch Gulch

In 2017, TU and its project partners tackled the third and final phase of construction at the Minnie Lynch Mine, in the Bonanza Mining District by Kerber Creek in the Rio Grande basin. Construction at Minnie Lynch focused on consolidation, capping and revegetation at four main waste piles remaining at the

site. In addition to these actions, TU incorporated toe slope protection at the base of each waste pile to reduce mass wasting and promote stability. TU also constructed a limestone-lined sediment detention basin to dissipate surface flows, capture contaminated sediment and convey clean water to downstream portions of the site. Finally, TU constructed multiple, vegetated, stable drainage channels across the Minnie Lynch site. These channels will direct surface drainage away from any remaining mine waste and ensure long-term sustainability and stability for the site.

Taking flow

measurements



#### Akron Mine

The Akron Mine restoration project was closed out in 2017, with final monitoring, weed surveys and revegetation completed. This project, in the Tomichi Creek drainage, was done in partnership with the US Forest Service. No invasive plants were found on site except for common local farm weeds. Final reseeding was completed in late 2017 prior to first snowfall. Previous work in stabilizing and reclaiming this site led to some major national honors for TU's Abandoned Mine Program. For our work on the Akron Mine site, TU earned the National Association of Abandoned Mine Land Program's 2017 National Environmental Clean-up award, and the US Forest Service Regional Forester's Award for Sustaining our Nation's Forests and Grasslands.



# | Educating | Colorado's | Youth



#### Getting Colorado's Youth Outside

In 2017, Colorado TU and its chapters from Durango to Denver directly served more than 4,000 Colorado youth through approximately 100 different programs



and events under TU's "Stream of Engagement" vouth programs. These programs range from Colorado TU's annual youth camp to the Trout in the Classroom in-school program, from chapter fishing

clinics to student water quality monitoring through the RiverWatch program. TU volunteers contributed more than 6,600 hours of service towards these youth education efforts in 2017.

With the increasing demand for youth programming

from chapters and communities, Colorado TU has committed to expanding its capacity to support youth education throughout Colorado. The Headwaters Youth Program will be an independently-funded initiative committed to inspiring and engaging youth from the elementary school level, all the way through college.

Using the "Stream of Engagement" delivery model, Colorado TU (CTU)

and its local chapters will provide Colorado youth with a diverse set of experiences at different ages, spanning watershed science, stewardship, and fly-fishing. Our youth programming fosters young adults into vigilant river stewards, competent anglers, and future leaders in Trout Unlimited and their communities.

With the proposed expansion of the Stream of Engagement model, the CTU Youth Work Group plans to double the number of youth served over the next five years.





"Young people today love experiencing nature first hand. CTU Youth Camp gives them the opportunity to learn about the issues facing our environment. 2018 will be my 11th year as a volunteer at CTU Youth Camp. My wife says I return 10 years younger after working with these enthusiastic young campers!"

Jim Williams, RSC donor and Pikes Peak Chapter leader

#### Chapter Spotlight: Gore Range TU (Summit County)

## **New Signs Along Blue River Encourage Outdoor Learning**

In partnership with the Town of Silverthorne, TU's Gore Range Chapter in September 2017 celebrated the opening of the "Blue River Explorer Hike," a free, self-guided trail that is open daily. The half-mile trail



along the Blue River through town includes new signage highlighting the river's ecology, history, and significance in the community. The signs provide a more interactive and engaging experience along the trail. Children can

pick up a free activity booklet and sticker that accompany the Explorer Hike at the Colorado Welcome Center in the Green Village-Outlets of Silverthorne.

The signs also provide an opportunity to explain trout biology, watershed management, and challenges and solutions of water supply in Colorado. The Gore Range Chapter hopes the project will engage and educate Summit County youth as well as visitors on the importance of their local waters and the habitat it provides for trout and other wildlife.

## **Investing** in Colorado

TU in Colorado: By the Numbers

- **24** Active Chapters
- 20 Professional Staff Members
- 12,415 Grassroots Members
- 45,732 Volunteer Service Hours
- \$4.7 Million Invested
- 94 Chapter Youth Events
- 42 Veterans Service Projects
- 68 Chapter Grassroots Conservation Projects

#### Financial Report: Leveraging Your Impact

In fiscal year 2017, Trout Unlimited in Colorado invested more than \$4.7 million toward its conservation and education programs, on-the-ground projects, and chapter support. These funds included the work of the Colorado Council and its 24 local chapters—from legislative advocacy at the General Assembly to an annual youth camp to native trout restoration projects; as well as Colorado-based National Trout Unlimited programs and staff working on initiatives for river conservation, agriculture partnerships, public land protection, and abandoned mine reclamation.

Through the leveraging power of partnerships and grassroots contributions, TU helps make your donor dollars go farther for our conservation mission. Your individual and corporate donations of \$595,000 were leveraged by over \$4 million in funds from grants, events, and other matching funds. TU cash funds in Colorado were complemented by an additional \$1.19 million in "sweat equity"—the value of more than 45,000 volunteer hours contributed through our grassroots volunteers. Additional partners contributed another \$169,000 toward our efforts as cash match on joint projects—not to mention the substantial in-kind contribution of agency partners like Colorado Parks and Wildlife whose biologists help advise and conduct projects in collaboration

"RSC donors gathering to fish at North Fork Ranch

with Trout Unlimited. In total, more than \$10 of conservation value was generated from each \$1 of individual and corporate support to Trout Unlimited in Colorado.

The vast majority of TU funds go directly into programs for conservation, education, and grassroots engagement. For fiscal year 2017, 85% of TU in Colorado funds were directed toward program services, 12% for general administration, and 3% for fundraising.



Protect
Our Rivers
Partnership
Program
donors are
corporate
partners who
care about
healthy rivers
and fisheries
and contribute
annually in
support of
Colorado TU's
work to protect
and restore
our state's
watersheds and
wild places.



\$595,000 – Individual and Corporate Donations

## Your Support Makes the Difference!

**River Stewardship Council** (RSC) donors provide core support for Colorado Trout Unlimited's work on stream management planning, native trout reintroduction, watershed and conservation education for Colorado youth, engagement with our 24 chapters and over 11,000 grassroots members, and more. This community of seventy donors is committed to conserving, protecting, and restoring Colorado's rivers and wild places. As members of our flagship donor society, RSC donors contribute \$1000 or more annually and enjoy exclusive trip invitations and an annual donor dinner.

Trout Unlimited was born in 1959 when George Griffith brought together a group of anglers at his home on the banks of the Au Sable River in Michigan. The Griffith Circle honors the legacy of these founding members while raising essential resources to continue the march toward their vision. Griffith Circle members make annual contributions of \$1,000 or more and support the full range of nationwide Trout Unlimited projectsconservation science as well as environmental education. advocacy, hands-on restoration work, and so much more.

The Silver Trout Foundation was established through a generous bequest from former Colorado TU president Steve Lundy and funds are managed by past recipients of the prestigious Silver Trout award. The Foundation manages endowment funds for the long-term benefit of Colorado TU and provides donors interested in making endowment gifts a vehicle for leaving their own legacy of coldwater conservation.

For more information or to join RSC, the Griffith Circle, to discuss legacy giving through the Silver Trout Foundation, or if your business is interested in becoming a Protect Our Rivers corporate partner, please reach out to Shannon Kindle, Colorado TU Development Director at Shannon.kindle@tu.org

Thank You!

Trout Unlimited thanks the generous individuals, businesses, and foundations whose support – along with yours – makes our successes possible:

Scott Jennings

Pitch and Cathie Johnson

#### Griffith Circle/River Stewardship Council Donors

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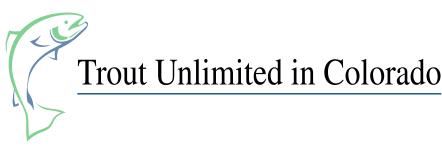
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