

Shaw Diversion, a fish passage barrier on the Boulder River we are working to remove. See story pg. 5

WINTER 2024

THIS ISSUE:

New FWP research staff for SWMT pg. 3 New Climate Change Coordinator pg. 4 Shaw Diversion Dam removal pg. 5 Donor gifts MTU a new boat pg. 6 plus... Chapter News and more!

WINTER/24 Montana Tu's Mission

is to conserve, protect and restore Montana's worldclass coldwater fisheries and their watersheds.

Founded in 1964, Montana Trout Unlimited is a statewide grassroots organization comprised of 13 chapters and approximately 4,000 TU members.

www.montanatu.org

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FROM THE CHAIR: Brian Neilsen

My daughter Margo asked why MTU's work matters, and I told her that this summer we're about to be reminded exactly why it matters. For 60 years, we've been working for more cold, clean water in MT systems, and this summer that could make the difference between flows and dry stream channels.

67%, 61%, 59%, 57%, 47%! These are the frighteningly low percentages of long-term normal Snow Water Equivalent (SWE, or more commonly, snowpack) for the end of January in the Flathead, Bitterroot, Jefferson, Upper Yellowstone, and Upper Clark Fork basins, respectively. In my homewaters of the Missouritrout fisheries like the Sun, Teton and Marias Rivers - the SWE has plummeted to 35% because of how dry and warm the first month of 2024 has been. Everyone paying attention is already talking about epic wildfires, poor crops, and low, warm, if not dry rivers this summer. As anglers, we survive on optimism. As humans, we know that there's lots of weather ahead that could change the mounting drought conditions and dire predictions.

As coldwater conservationists, we are ratcheting up our efforts to do what we can when it comes to water, especially instream flow, in Montana, from specific on-the-ground projects to the big picture of climate. You see that reflected in this edition of MTU's newsletter.

Since its inception, TU has worked on what we now call climate resiliency by building healthier streams and fighting for policy that protects or enhances the health of coldwater resources. In these pages you will read about MTU's effort to increase our understanding of and engagement in big picture climate change by designating Maggie Althaus as the organization's Climate Change Coordinator. In this role, she



will be working with and pushing all levels of TU to advocate more and more effectively on climate issues. Chris Edgington's feature on removing a dam, restoring stream habitat and securing additional cold water for the Jefferson basin illustrates how his program in southwest Montana is focused on that, above all else, trout need cold water. And a special guest article in this Trout Line by Montana Fish, Wildlife & Park's Region 3 Fisheries Manager details the focused and greatly increased efforts and resources that the state agency is directing to addressing the long-term drought and historically low fish populations in southwest Montana, efforts MTU has pushed hard to ensure are robust, science-driven and urgently pursued.

We can do little to change the weather in 2024. What we can do is double-down on our ability as members and as an organization to find solutions in projects and policy that benefit cold, clean water this year and for generations to come. And, yes, I'll be doing my daily snow dance again this evening.

BNA

We're more than just a pretty plate...



13 LOCAL CHAPTERS - STREAM RESTORATION -DEFENDING THE SMITH - PROTECTING INSTREAM FLOWS -COLLABORATION WITH FWP - CONSERVATION YOUTH CAMP - WILD TROUT MANAGEMENT - MINIGRANTS - NATIVE TROUT RECOVERY - CLIMATE RESILIANCY and more!

Only one Montana trout license plate helps conserve, protect, and restore coldwater fisheries STATEWIDE.

MT Council of Trout Unlimited

Ask for our Monte Dolack plate at your local county treasurer's office when you renew your registration or register a new vehicle!

CONSERVE. PROTECT. RESTORE.

FWP/MSU hire new staff for SW MT research by Mike Duncan, FWP Region 3 Fisheries Manager

Montana Fish, Wildlife & Parks (FWP) is collaborating with Montana State University (MSU) and other partners on efforts to better understand trout declines in the Beaverhead, Big Hole, Madison, and Ruby rivers. The work will focus on the following four areas with fieldwork starting this spring: recreational use, adult mortality, juvenile survival and habitat use, and fish health. To support those efforts, MSU

recently hired three PhD students while FWP created a new fisheries position based in Dillon.

A major component of the adult mortality study will involve tagging efforts that will allow researchers and FWP biologists to track individual fish through time. We know water is the major driver of most trout fisheries in SW Montana. However, the tagging study will provide better insight into the relative contributions of flows, water temperatures, fish health, and angling on rainbow and brown trout mortality. Although we will be stepping up our monitoring

efforts the next several years, we need help from anglers to make this study successful. In the coming weeks, we will establish a website and phone number that will allow anglers to report tagged fish. Creel clerks will also be interviewing anglers starting this spring, which will provide another opportunity to engage anglers. While the chance for anglers to actively participate in our management efforts might be enough incentive for most people, we will be offering rewards through random drawings to anglers who report tagged fish. Details

about the rewards and upcoming studies will be posted on our website and shared with our local angling groups in the coming weeks.

In the Big Hole and Beaverhead rivers, FWP staff and anglers have observed sick and dead fish with apparent increasing frequency in recent years. FWP has conducted health assessments in those rivers. However, disease in fish is a complex interaction

(USGS) and U.S. Fish & Wildlife Service (USFWS). However, those efforts did not identify a new pathogen or what is thought to be the cause of the infections. It remains unclear whether the observed fungal infections or lesions are the primary cause or secondary effects of another disease.

FWP has convened a workgroup with experts from across the country to better understand risk factors and underlying

stressors influencing

and population levels

in these rivers. The

workgroup includes

fish health experts,

water quality specialists,

microbiologists, fish

physiologists, and fish

biologists with FWP,

Washington Animal

at Washington State

University, and the

MSU, USFWS, USGS,

Disease Diagnostic Lab

USGS Montana Coop-

erative Fishery Research

Unit. The workgroup

will develop a proactive

monitoring approach,

including reporting

timelines, that will

be implemented this

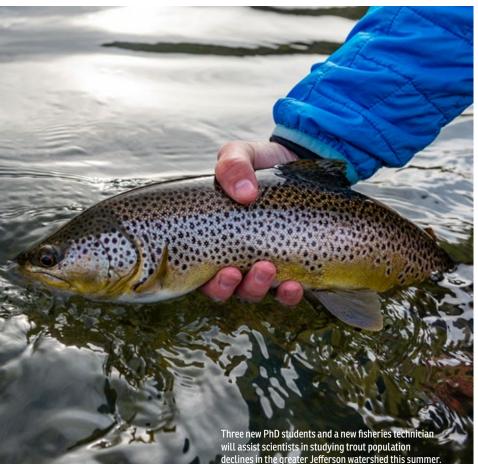
spring and shared with

the public in a timely

manner.

histopathologists,

fish health at individual



declines in the greater Jefferson watershed this summer

among the fish host, potential pathogens, and environment, which poses challenges in determining the primary cause of fish health issues. Thus far, testing has not identified any bacteria or viruses that are common fish pathogens. FWP staff have detected the parasite that causes proliferative kidney disease in the Big Hole River and many other rivers across Montana. However, staff have vet to see the disease manifest itself in fish. Tissue from diseased fish were examined at a cellular level by pathologists from the U.S. Geological Survey

Mike Duncan is the Region 3 Fisheries Manager for Montana Fish Wildlife & Parks. He can be reached at Mike.Duncan@mt.gov, with any questions or concerns.



CONSERVE. PROTECT. RESTORE.

MTU expands climate change work by adding new staff role by Maggie Althaus

At MTU, as we update our strategic plan for the next five years, we are committed to expanding our work around the impact of climate change on coldwater fisheries. In the fall of 2023, I stepped into a new staff role as Climate Change Coordinator to engage chapters, members, and other partners in spreading awareness of climate change and its impacts on trout.

As Coordinator, I joined a group of Trout Unlimited volunteers from other state councils and chapters on the National Leadership Council Climate Change Workgroup. This group works with TU Science and Government Affairs to share information with TU's more than 150,000 members who have detailed knowledge of local and regional conditions.

Through our chapters, we aim to empower Montana TU members to become champions of climate change policy and initiatives in our communities. My goal is to continue making climate change education opportunities and materials more accessible and applicable for existing programs, as well as for policy and advocacy issues both local and national.

Increasing MTU's engagement on climate change will also include



strengthening our outreach and crossorganization communication on ongoing policy, assisting chapters in incorporating climate change awareness into their outreach, and increasing our commitment to mitigating climate change in our new strategic plan.



In our operations, I have created a statement for our position on climate change, responsible energy development, and climate equity to guide our day-to-day work. Under this guidance, MTU is taking responsibility to shift to more sustainable options including renewable energy for our office space, reducing the use of paper, and upgrading to an eco-friendly vehicle for our statewide travels.

In addition to continuing and growing our 60 years of building resilience to climate change through coldwater stream restoration, which often entails both habitat improvements and increased instream flows, we aim to better serve members and trout through this new position and emphasis. While we might not all be anglers, we are all water users. From the health of your favorite spot in your home watershed, to the rest of the world's stream and rivers, all of us are counting on cold, clean water. So the importance of collaborative work on mitigating climate change transcends our differences. We owe that effort to future generations.



CONSERVE. PROTECT. RESTORE.

Shaw Diversion removal project planned on Boulder by Chris Edgington

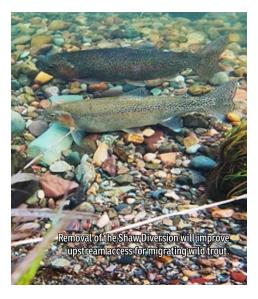


On a bright morning in early spring 2021, I met with FWP fisheries biologists at a ranch along the lower Boulder River, about 2 miles north of Cardwell. Everyone shared that giddy feeling of anticipation you get when exploring further upstream on a familiar creek than you previously had. Precisely what we were gearing up to do. We traded our fly rods for electrofishing and data collection equipment.

Over the winter, I had received a call from an irrigator who was concerned about an aging diversion dam, critical to his operation. I knew that if we could develop a fish-friendly solution that kept the irrigator whole and provided peace of mind to the landowner, Golden Sunlight Mine, there'd be the prospect of restoring fish passage to more than 70 miles of the mainstem Boulder and its tributaries.

Rising in the rugged Boulder mountains north of Butte, the Boulder River is the largest tributary to the Jefferson downstream of the Beaverhead-Big Hole River confluence, providing a boost of cold water near the midpoint of the Jefferson's 83-mile length. The project area is on the Candlestick Ranch, less than three miles upstream of the confluence with the Jefferson. Three diversions, including the channel-spanning Shaw Diversion Dam, a documented fish barrier, deliver water to 233 acres of fertile cropland. Over the last three field seasons, our baseline data collection has helped to quantify potential benefits of, and to guide project development. That on-the-ground work also built trust among partners. To date, we've recorded continuous stream discharge and temperature monitoring, irrigation withdrawal, fish population estimates up and downstream of the dam, redd counts, juvenile trout out-migration surveys, a wetland delineation, and completed a preliminary engineering report.

To accomplish the dam removal, our partners are making significant investments in irrigation infrastructure, converting their water delivery to instream pumps. Benefits of this conversion include leaving



more water instream and eliminating fish lost to irrigation ditches. It also allows for the removal of Shaw Dam and stream restoration. In December, we hired project engineers, many of whom designed the successful Rattlesnake Dam removal completed by TU in 2021.

This is the type of win-win project that MTU strives to develop. We will alleviate infrastructure concerns for the landowner and irrigator, and deliver a significant ecological uplift to the Boulder and Jefferson Rivers. Quantifiable project benefits include: providing fish and other aquatic organisms passage for thermal refugia and spawning; conserving 7 CFS of water that is generally 2-3° F colder than the Jefferson during summer months and will increase the current 28 CFS base



flow; eliminating fish entrainment in three irrigation ditches; reducing nutrient and sediment loading; enhancing floodplain and wetland function; and, improving irrigation delivery and efficiency to valuable cropland.

This is our number one priority in the Jefferson Basin. We have a lot of work to do and a significant amount of fundraising ahead to complete this project in fall 2025. With your help, we will get it done. We'll keep you updated as the project progresses and are excited to document how this investment improves conditions for wild fish in the Jefferson.



Stewardship Spotlight

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Family drift boat finds a home at MTU by Kelley Willett

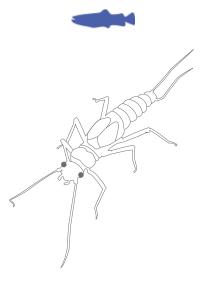


I never had the good fortune to meet him, but I know that this donor fished all over the world, was married to the love of his life, spent time at Everest base camp, and had friends who absolutely adored him. I know all of this because one of his closest friends reached out to me after his death and together with his widow, decided to honor his memory and make a big difference for MTU. All of these unassuming people wish to remain anonymous.

A past state council volunteer (who himself had given time and treasure to MTU over the years) was helping a dear friend who recently lost her husband. They wanted his abundant fishing gear and drift boat to raise funds for coldwater conservation in Montana. As ever, MTU, is humbled when people think of us during the hardest of times.

After a handful of conversations, the volunteer suggested donating the top-of-theline, gently used, drift boat to MTU. Each year MTU hosts friends and donors on float trips to highlight the great work that their philanthropy makes possible. The aim is to show impact, and hopefully that results in more philanthropy. We've been rowing folks down the river in a very well-loved, two-decade old drift boat that has seen better days. Last year a staff member was ejected when a seat broke; we've been questioning if the boat is still safe for tours. We would not want to use donor funds to buy a new craft, which is why the gift of this beautiful, safe, comfortable boat is such a boon. We know that when people see the work, and the fish, and the repaired riparian corridors, that they want to continue giving, and in many cases give even more. A day on the water gives us the perfect place to also talk about our policy, advocacy and education efforts that also benefit Montana's coldwater fisheries. We are excited to put a plaque in the boat recognizing this family for helping us and honoring this anglers' legacy.

Fifty years from now, someone will be fishing a reach of a Montana river that was dear to this angler, and that will be thanks to his friend and his widow having the vision to honor his memory with a gift that truly keeps on giving.



Chapter News

Bitterroot Chapter

The chapter recently received a mini grant from MTU to do an environmental assessment of the area where Sheep Creek and the West Fork join in response to a proposed mine in the drainage. We have a well-qualified graduate student who will do the work. She will also be doing a cultural assessment of the area from the point of view of indigenous cultures. The MPG Ranch is also providing funding to this project. The conservation project at the Lee Metcalf Wildlife Refuge has unfortunately been delayed until the fall of 2024. An archaeological report by the U.S. Fish and Wildlife Service was not completed in time. We are working with the Forest Service to help rebuild the boat launch across from Trapper Creek Job Corps Center on the West Fork. This project will start in the fall and will require a number of volunteers to help complete it. Stay tuned for more.

George Grant Chapter

The George Grant Chapter will hold their annual Banquet on March 15th at the Copper King in Butte. At the "Banquet of EPIC PROPORTIONS" GGTU will be raffling off two NRS Slipstream Deluxe 120's with all the fixings. Only 150 tickets are sold at \$100/each. GGTU will also be raffling off two Sweetgrass Bamboo Rods, yes TWO! Only 150 tickets at \$100/each. Email president@ggtu.org for more info. The board continues to be active pursuing full funding of our project Fifer Gulch in Anaconda and we are pleased to announce the final design and initial site floodplain modeling efforts are underway.

Madison-Gallatin Chapter

Madison Gallatin Trout Unlimited's 52nd Annual TroutFest Banquet will be held on Saturday, February 24th, 2024 at the Best Western GranTree Inn in Bozeman. We are looking forward to another great event! The event starts at 5:00 PM and includes silent and live auctions, wine and beer trolley raffles, prize drawings, evening presentation, and good times and ALL in the name of Conservation of SW Montana's coldwater fisheries! As always, we will be using a mobile bidding platform - Givergy - so folks can participate from near and far. This is MGTU's one and only fundraiser and all proceeds from the banquet go towards MGTU's mission statement to conserve, protect, and restore SW Montana's cold water fisheries and their watersheds. Not attending the banquet? You can still register to view and bid on auction items from afar. Viewing for auction items will open on Monday, February 19th at 9:00 AM MST. Bidding will open on Thursday, February 22nd at 9:00 AM MST.

Missouri River Fly Fishers Chapter

Winter River Fest is coming up Feb. 17 at the Newberry and tickets are going fast! Call the Newberry at (406)315-1155 to get your ticket or reserve your table. We will have a bunch of great art and other items up from auction and raffle. For more information please contact Tracy at mrftu406@gmail. com. State of the Rivers and Reservoirs will take place Feb. 29 at 6pm at the Do Bar. Come get a fisheries update from our local FWP biologists.

Westslope Chapter

Our annual banquet and auction is coming up on February 24 at the University of Montana. Designed for the fly fishing and conservation community; raffles, door prizes, trips, unique items, and more. Let's celebrate clean, cold water, have fun, and raise money for cold water conservation and fly fishing education. Join us as we chart a course for conservation excellence in the new year. Discover innovative projects, community initiatives, and the latest in trout habitat preservation. Be part of the movement shaping a sustainable future for our beloved rivers and fisheries. Don't miss WestSlope Chapter Trout Unlimited's kickoff event of 2024 - let's make waves for a thriving aquatic ecosystem! If you have an item to donate to the auction or are interesting in a sponsorship, please email the chapter at westslopechapter.tu@gmail. com.



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TROUTLINE WINTER UPCOMING EVENTS www.montanatu.org

2/17/24	Winter River Fest, MRF The Newberry, Great Falls
2/24/24	Westslope Chapter Banquet UC Ballroom, Missoula
2/24/24	Madison-Gallatin Chapter Banquet GranTree, Bozeman
3/2/24	MT State Council Meeting
3/15/24	George Grant Chapter Banquet

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