

Riffles

WINTER 2021 FIELD UPDATE



A CLEAN & HEALTHY CLARK FORK *Thanks to You!*

clarkfork.org

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*Through yet another record-setting hot summer, dramatic political and social change, and the fear, uncertainty, and fatigue of an ongoing pandemic, the Clark Fork River has been a welcome, steady constant. A touchstone for our lives with the power to bring out the very best in us. This year, we've seen the best in **you** in the many ways you helped keep the watershed clean, healthy, and whole—from healing streams in need, to restoring flow to parched creeks, to removing pollution, to fighting to protect clean water. Read on to learn more about your impact in 2021, and **thank you** for helping to protect and restore the Clark Fork River watershed!*

Engaging and educating people



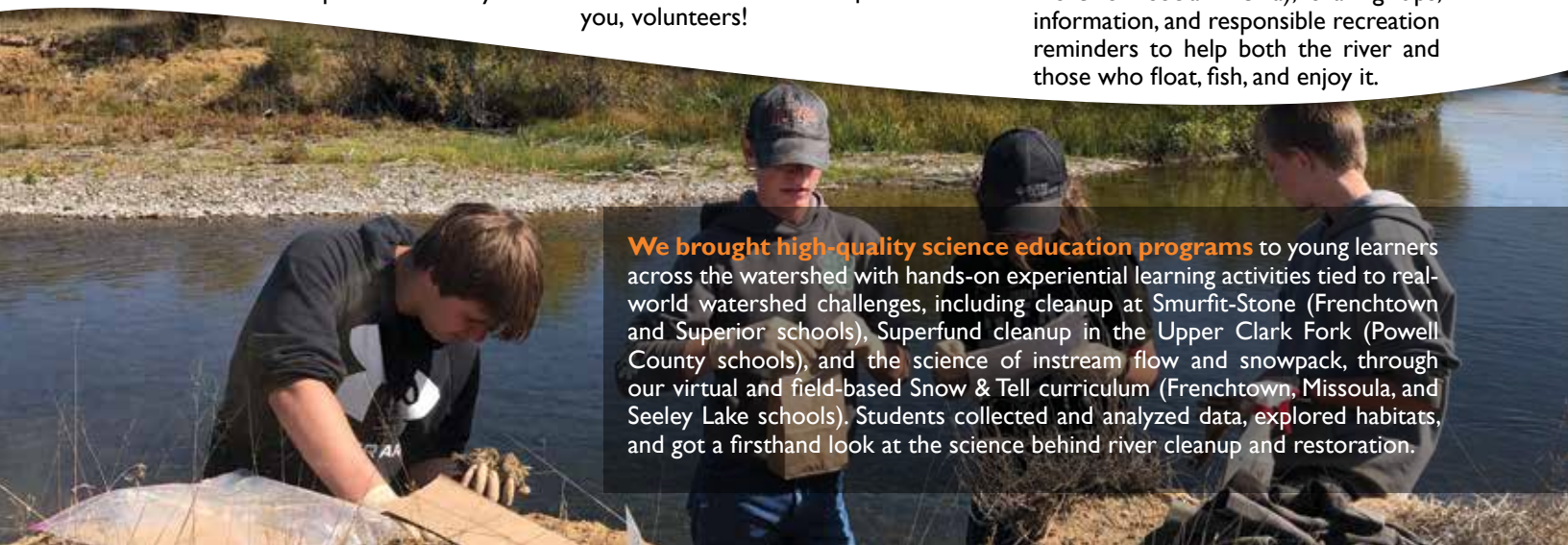
Volunteers showed up in a big way for the Clark Fork River this year. In addition to the hundreds of individuals who pitched in on the annual river cleanup, some 100 volunteers participated in 14 field project days at CFC restoration sites, helping with plantings, care, weeding, and watering of riparian restoration areas, maintenance of beaver installations, fence-mending, fish screen cleaning, browse protector installation, data-collection, and more. Big thanks to everyone who rolled up their sleeves to help the river this year!



Neither rain, nor snow, nor a global pandemic can keep people from helping the river, which was brought home in a big way with the 2021 DIY Clark Fork River Cleanup. An estimated 600 volunteers worked over six days, cleaning a whopping 180 miles of river bank—a 12-fold increase in river miles covered over previous years! Generous sponsors pitched in to make this day of river service possible and to provide prizes to participants, and many tons of trash and debris were removed from the floodplain. Thank you, volunteers!



A brand new River Ambassadors program launched this summer, a collaborative effort between Missoula County, the City of Missoula, MT Fish, Wildlife & Parks, and Clark Fork Coalition, who co-created and managed the program. The goal: improve public recreation experiences and protect conservation investments in Missoula Valley rivers. The result? Four ambassadors, working on the river and at local access points, reached 1,200 people in the field (along with 3,200 more on social media), sharing tips, information, and responsible recreation reminders to help both the river and those who float, fish, and enjoy it.



We brought high-quality science education programs to young learners across the watershed with hands-on experiential learning activities tied to real-world watershed challenges, including cleanup at Smurfit-Stone (Frenchtown and Superior schools), Superfund cleanup in the Upper Clark Fork (Powell County schools), and the science of instream flow and snowpack, through our virtual and field-based Snow & Tell curriculum (Frenchtown, Missoula, and Seeley Lake schools). Students collected and analyzed data, explored habitats, and got a firsthand look at the science behind river cleanup and restoration.

Removing pollution, preventing new contamination, protecting clean water



At the contaminated Smurfit-Stone site, we're a few small, but important steps closer to cleanup thanks to public input and support of our *Clean Smurfit Now* campaign. More than 66,000 people downloaded our "Toxic" podcast; some 50,000 people saw our videos and social media posts; and the public and our partners joined us in calling for the Environmental Protection Agency (EPA) to move from "if" to "how" to clean up the site. We've seen a more responsive EPA as a result, but we have a long way to go—stay tuned.



Superfund cleanup of four miles of floodplain between Perkins Lane and Galen Road in the Deer Lodge Valley got underway this year. This stretch is one of the most contaminated reaches of the whole upper river corridor. After long delays in previous phases, we're encouraged that the work here is on pace to finish in 2023, putting it ahead of schedule. We're also happy to see Montana Department of Environmental Quality (DEQ) doing much more to improve transparency and engage the public—recommendations we made to the agency in June.



A new Master Planning Process for Upper Clark Fork cleanup will roll out in early 2022, guiding how cleanup from Warm Springs to Garrison will proceed over the next 15 to 20 years, including site prioritization and funding. We worked with agency contractors to ensure they have the best data available to draft this new plan. We also worked with DEQ to ensure the Clark Fork River Technical Assistance Committee (Superfund citizen advisory group) is fully supported and funded to ensure the public has a voice and a forum to discuss their needs, concerns, and questions as this massive cleanup process continues.

Defending clean water laws; improving policies



This summer's prolonged extreme heat and severe drought pushed rivers and fisheries to the brink, but also presented an opportunity to advance solutions to boost resilience. We ramped up outreach on a suite of policy recommendations, such as overhauling water conservation processes, funding large-scale water leasing, and updating "hoot owl" fishing restrictions to be more protective. We also helped create a flow-focused working group in the headwaters, and provided input to the Gianforte administration and agency directors on much-needed reforms to the state's water policies and drought management plan.



Montana has some of the strongest clean water laws in the country, but that didn't stop lawmakers from trying to weaken, circumvent, or eliminate them during Montana's 2021 legislative session. With the help of our crew of 70 volunteer Water Watchdogs, we defeated bills that would have threatened clean water, allowed more nutrient pollution, re-opened loopholes and created exemptions for developers, weakened regulations, or lowered the bar for protections of Montana's most pristine and threatened water resources.



We continued to protect the Cabinet Mountains' pristine waters and bull trout streams by working with our partners to hold the line on the proposed Rock Creek and Montanore mines. In 2021 we advanced our "bad actor" case to ensure that the state enforces the law that keeps mining companies and their executives from profiting off Montana's resources until they have cleaned the sites they polluted, and reimbursed the state for cleanup costs. After 34 years of defending these waters, we're not stopping now!

Keeping streams healthy and resilient

Ten thousand more fish swam in Lolo Creek this fall, and nearly zero found themselves in a dead-end ditch after a successful first season of the Lolo fish screen. At the same time, ranchers got all the water they needed for crops, and, thanks to Lolo Watershed Group and dedicated volunteers, riparian plants are now taking hold at the construction site. Big thanks to the many partners who helped make this possible. Watch our video to see the screen in action and learn more:

[TINYURL.COM/LOLOFISHSCREEN](https://tinyurl.com/lolofishscreen)

Miller Creek, just south of Missoula, sustains populations of genetically-pure westslope cutthroat trout, but faces challenges such as fish passage barriers, severely eroding banks, high sediment loads, and degraded aquatic habitat. But things are looking up! As part of a multi-year effort, in 2021 we completed a fish barrier survey and multiple restoration projects along a seven-mile reach to stabilize banks, restore connectivity, remove failing culverts, add riparian vegetation, improve habitat complexity, and reduce sediment and stream temperatures in this native trout stronghold. More coming in 2022!

Bull trout are breathing a bit easier in the Upper Lolo watershed after we decommissioned two more miles of sediment-bleeding forest roads, removed undersized culverts, and restored five stream crossings to natural conditions. With the completion of Phase IV in this watershed, we have now rehabilitated nearly 30 miles of roads, replaced 19 under-sized culverts, prevented thousands of tons of road sediment from clogging bull trout spawning streams, and restored access to headwaters habitat that provides life-saving cool water when soaring summer temps push native fish to their limits.

To keep urban reaches of the Clark Fork healthy and resilient in the face of intensifying development pressures, we're increasing watershed resiliency through projects in Missoula like our Restore Grant Creek campaign (launched in 2021), which takes a headwaters-to-mouth approach to heal degraded areas while protecting still-intact reaches. This year we also helped the City acquire and retire the Flynn-Lowney Ditch, which eliminates entrainment risks and recreation hazards, will return ~2 billion gallons/day to the river, and opens the door for much-needed river restoration projects at this diversion site.

Beaver are exceptional ecosystem engineers, providing clean water, habitat complexity, and structures that slow runoff and keep water cool and plentiful. But those benefits can come at a too-high cost for land managers and property owners when it means clogged culverts, flooded roads, and damaged



or downed trees. In 2021, our Beaver Conflict Resolution program (co-sponsored with National Wildlife Federation and Defenders of Wildlife) installed 17 projects, providing non-lethal management

solutions along with trainings for agencies and conservation groups.

To bring about a world-class cleanup and restoration in the Upper Clark Fork, we need to understand how the river, fish, and floodplain are responding to cleanup, and ensure ecological goals are being met. We worked with professors and students from the University of Montana, UM Western, and Montana Tech on field research projects, such as fish habitat and vegetation recovery on remediated sites, geomorphology and contaminated sediment movement, channel migration and bank stabilization analysis, songbird colonization of remediated floodplains, metals contamination in birds, and more.

Restoring instream flow is one of the most effective ways to improve stream health and enhance the watershed's resilience. Across the basin we ensured that 6.8 billion gallons of water stayed in chronically dewatered streams this summer through active management and monitoring of our leased and owned water rights (32 sites on 22 streams). We added another 500 million gallons in the Upper Clark Fork by winning legal protection for instream flow, and by replacing two miles of leaky ditch with stockwater pipeline, thereby reducing water withdrawals.

Thank you again for making this work possible!



Lolo Ditch fish screen



Surveying Miller Creek



Lolo road decommissioning



Flynn-Lowney Ditch



UCF field research



Photo: Jason Fitzgibbon

Make *Riffles* of your own when you support the Clark Fork Coalition!

From removing a dam, to restoring a confluence, to ushering in an exciting era of river recovery, your support does a lot. Donations are always much-needed, deeply appreciated, and immediately put to work for the Clark Fork watershed.

Already a supporter? Share this mailing with a friend and invite them to join! New members join **FREE** through Dec. 31—just use the enclosed card to send us their name and address and we'll do the rest!

FRIENDLY REMINDER if you'd still like to help the river in 2021: **Through December 31**, you can subtract total donations up to \$300 (\$600 if married, filing jointly) from your gross income—even if you don't itemize. Cash gifts made to Clark Fork Coalition this year can have a greater impact for both you and the river.

Talk to your tax advisor to explore this unique giving option in 2021. It's a great time to support clean and healthy rivers!

How to Support the River through a Bequest, Will, or Trust

It's easy to support clean and healthy rivers for generations to come! By naming the Clark Fork Coalition in your will or estate plan you will help ensure that the Clark Fork watershed is protected now, and long into the future.

It's a great way to keep giving back to the river you love! Talk to your financial advisor, and contact Liz Murphy at liz@clarkfork.org for a simple, free how-to guide to help you get started.



Photo: Cynthia Swidler