# Riffles FEBRUARY 2024



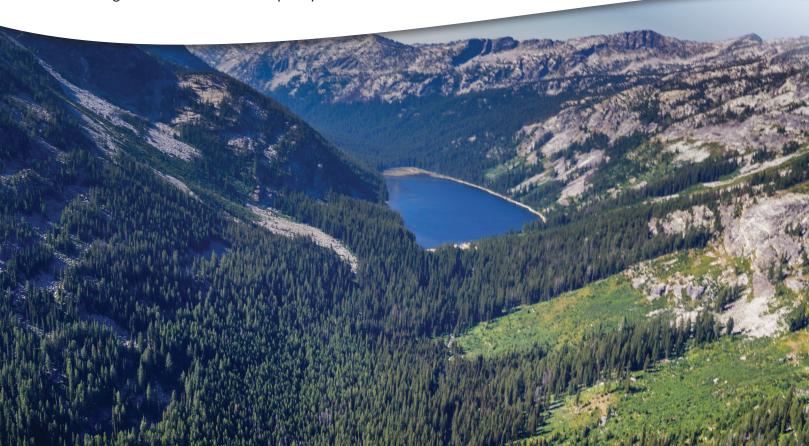
## **2023 IMPACT REPORT**

## Restoring and Protecting the Clark Fork Watershed

The Clark Fork Coalition's work depends on a community of river lovers—like you—who appreciate clean, cold water for healthy habitat, thriving communities, beauty, and recreation. It's with the strength of your collective voices that we are able to protect and restore the river. Read on for highlights of what we've accomplished this year in the Upper Clark Fork, Bitterroot, Blackfoot, and Missoula river corridor, and through our statewide water advocacy. As we reflect on 2023, underpinning each win is deep gratitude for your ongoing support and generosity. **Thank you!** 

## Headwaters Storage Analysis

Climate chaos is one of the biggest challenges currently facing the watershed. In response to deep uncertainty in snow-pack levels and runoff timing, headwaters storage has risen as an innovative solution to these issues. In the Upper Clark Fork, our water rights in Racetrack Lake help keep Racetrack Creek flowing and connected to the mainstem. In 2023, we explored headwaters storage plans in the Bitterroot, and along with partners, analyzed drainages with the most potential for headwaters storage to help both wildlife and irrigators.



## **Upper Clark Fork**

HE UPPER CLARK FORK SUPERFUND COMPLEX is just that—complex. Legacy mine waste covers over 120 miles of riverbank, negatively affecting human health, fish spawning, and food webs. While balancing so many variables is incredibly difficult, a thorough cleanup of the largest Superfund site in the United States is crucial. In 2023, the Clark Fork Coalition met these monumental challenges with action

#### SUPERFUND ADVOCACY

Locals and river advocates used our talking points to comment on agencies' new strategic plan for the next 25 years of cleanup. We emphasized human health, ecological complexity, fish habitat, and river function. The plan now incorporates many improvements and integrates research findings to adapt streambank design for better habitat, but it still has a funding problem. We continue to work with the state to push for the best cleanup possible.

#### **ARROWSTONE PARK**

We convinced agencies that a prior cleanup of Arrowstone Park—a popular riverside recreation area in Deer Lodge—was failing. We spurred them to erect signs, fence hot spots, and make park cleanup the #1 priority for 2024.

#### **RESEARCH**

Through university collaborations, critical field research projects answered key guestions and generated vital data to guide clean up and restoration of the Upper Clark Fork, Projects included thermal river mapping, riparian habitat recovery assessments, trout migration tracking, macro invertebrate diversity evaluations, and channel migration studies.

#### **ADDITIONAL FLOWS**

Boosting flows in chronically dewatered streams improves aquatic habitat, fish passage, water temperatures, and tributary connections. We added over 21 cubic feet per second (cfs) of flow annually to priority streams and the mainstem through water transactions. We also made headway on adding another 12 cfs by retiring a whole ditch system.

## **REVITALIZING RIVER FUNCTION**

Our irrigation infrastructure upgrades, riparian plantings, channel re-naturalization, road improvements, and fish screen projects on Browns Gulch, Cottonwood, Baggs, Flint, Little Gold, and Boulder creeks improved tributary watersheds.



**RESTORING A TRIBUTARY** WATERSHED!



## **Bitterroot**

MID MONTANA'S RECORD-BREAKING TEMPERATURES, unprecedented drought, and intense fires, the Clark Fork Coalition's restoration work in 2023 improved water quality and flow, built resilience back into the ecosystem, and expanded native trout habitat.



# LOST HORSE FLOW & FISH SCREEN

In August, we took a major step toward improving the health of this trout stronghold when the U.S. Forest Service awarded CFC \$1.36M to develop and construct critical restoration projects on Lost Horse Creek.



### **UPPER LOLO RESTORATION**

We replaced eight undersized culverts on tributaries of Granite Creek, an important headwater tributary of Lolo Creek and a historic bull trout stronghold. These projects improve fish passage and spawning habitat, and protect against road failures.



# O'BRIEN CREEK RESTORATION

Last fall, we reshaped and realigned the O'Brien Creek stream channel away from the road, reconnected the floodplain, added large wood in the stream, and planted willows and other riparian vegetation.



# MILLER CREEK RESTORATION

Our multi-year efforts on Miller Creek are paying off. Last summer, we counted 475 fish in 100 meters of stream! Fish, Wildlife & Parks biologist Reuben Frey said this was the highest density of fish he has sampled in a small stream in western Montana.



Volunteers collected valuable data on fish habitat, riparian vegetation, and invasive weeds pre- and post-restoration on Miller Creek and O'Brien Creek in year two of community science monitoring.







## **Urban Clark Fork**

PRAWLING GROWTH AND DEVELOPMENT threatens ecologically vital and sensitive riparian corridors through the Missoula valley. With advocacy, community engagement, education, and better planning, the Clark Fork Coalition collaborated with a range of partners in 2023 to improve the urban watershed.

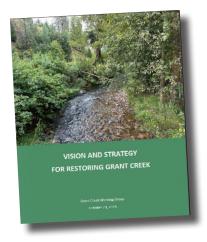


## ANNUAL RIVER CLEANUP

Volunteers picked up four to five tons of trash along the banks of the river before spring runoff carried it downstream. We're incredibly grateful for the almost 750 people and the business sponsors who continue to care for the river and help keep the Clark Fork clean.







#### **GRANT CREEK**

Together with dedicated stakeholders in the Grant Creek Working Group, we crafted a vision and strategy for improving water quality and ecological function for people and wildlife. The plan includes restoration on the lower six miles of creek.



#### **RIVER AMBASSADORS**

River Ambassadors spent nearly 1,500 hours at the busiest access points in Missoula's urban river corridor. They shared practical information, responsible recreation tips, information on watershed-related issues, and ways to help. River Ambassadors also participated in restoration activities, taught stewardship practices to local kids, and collected important data for tracking user trends on the river (spoiler alert: use is up).

## **CLEAN SMURFIT NOW**

The national advocacy group American Rivers took note of the toxic contamination at the shuttered Smurfit-Stone mill site and listed the Clark Fork as one of America's "10 Most Endangered Rivers of 2023." Along with partners, we leveraged the spotlight into news stories, opeds, media events, and letters to the editor, catching the Environmental Protection Agency's (EPA) attention. We followed up with EPA's Region 8 Administrator, state, and local officials and supported partner requests to conduct additional sampling.

We also partnered with other groups to test fish in the Clark Fork for toxins related to Smurfit. Finally, we secured funding for a berm study to predict contaminant dispersion in the event of major flooding and berm failure. We won't let up until Smurfit is clean.

## Policy & Advocacy

LONG WITH OUR 170 WATER WATCHDOG VOLUNTEERS, our policy and advocacy team defended strong clean water laws, defeated disastrous bills, and helped push pivotal water management bills through the 2023 legislative session.



#### **EXEMPT WELLS**

Together, we defeated the terrible exempt well bill HB 642. Exempt wells were originally intended for small family properties to add single wells, but exemptions have been twisted into a loophole for developers to drop thousands of wells, sucking up groundwater without impact studies or permits.



#### **WATER QUALITY**

Along with conservation allies, we took legal action against the Montana Board of Environmental Review for invalidating the Department of Environmental Quality's selenium standard for Lake Koocanusa. Their bad decision is allowing Canadian mining company Teck Coal to pollute Montana's waters. Our cases are working their way through court.





## Lower Blackfoot

once-in-a-lifetime opportunity to address watershed issues in the lower Blackfoot came to us this year. In partnership with the Bureau of Land Management, we secured \$850,000 to complete high-impact restoration work, removing barriers to fish passage, restoring aquatic habitat, and improving water quality by rehabilitating unused forest roads to decrease sediment. Stay tuned for updates!





## Donate today

Invest in a healthy watershed and support the Clark Fork Coalition's vital restoration work by donating today at **www.clarkfork.org** or scanning the QR code!



www.clarkfork.org

140 South Fourth Street West Missoula, Montana 5980 I

info@clarkfork.org

(406) 542-0539

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