the Trout Trust

WELCOME TO THE

Confluence

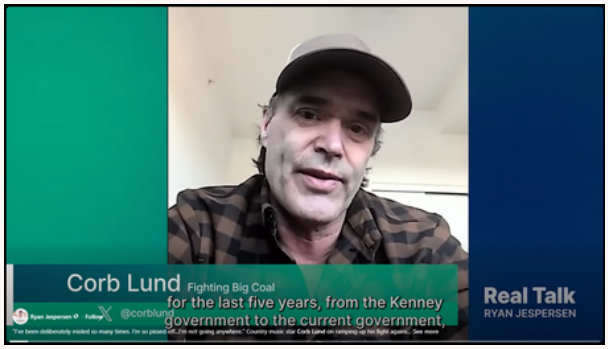
TTT - SPRING 2026 NEWSLETTER

In this issue:

Update on Coal

Jim McLennan

The issue of expanding coal mining in the headwaters of Alberta's rivers won't go away. It seems to have nine lives. Corb Lund has become a passionate, educated and credible voice in the resistance to this. His petition against coal mining in the Eastern Slopes has been re-approved by Elections Alberta. The petition says this: "The Government of Alberta shall prohibit through legislation all coal exploration and mining activities within the Eastern Slopes of Alberta's Rocky Mountains, other than mines that are in actual production as of January 1, 2026. For clarity, this prohibition includes Northback Holdings' Grassy Mountain Project and Valory Resources' Blackstone Project as well as any projects to expand any producing mines." The next step is that the petitions obtain at least 178,000 signatures by June 10. Find full information here: https://www.waternotcoal.ca/



Watch Video

Watch video

Update on Entrainment

SOME (HOPEFULLY) GOOD NEWS

In recent correspondence, Freshwater Conservation Canada CEO, Silvia D'Amelio reports that discussions with the Alberta Government yielded this statement: "In speaking with the GOA, they are working towards fish exclusion/deterrent on at least 1 structure (potentially 2) and we likely be working on assessing the effectiveness of that project. As a result, we will be committing to another 2 years of fish rescue."

We also ask that you consider joining other concerned citizens at The Trout Trust .

The Sorrow of the Long Memory

Lorne Fitch, P. Biol. (Reprinted by author's permission)

The ritual of remembering can falter because there are few left with whom to remember. My friend and mentor Carl Hunt and I often commiserate over the decline in our native trout populations. I appreciate that his memory stretches back further than mine. Those memories bring back life to things that no longer exist.

Early in my career he and I inspected an Alberta Transportation channelization project on Alford Creek, west of Caroline. Alford Creek was one of those unique spring creeks, like the North Raven, that is fed by shallow groundwater flows from the Clearwater River. As we stood on an eroding stream bank, looking down an arrow straight stream channel with bulldozed piles of willows on either side, Carl reflected on fishing the stream years before. The anger in his voice was palpable, describing the memory of a meandering, willow-shrouded trout stream filled with big trout that was now a ditch.

Recently Carl reflected on his experience over the last five decades in the northern foothills, based out of Edson: "Everybody has forgotten the science provided by Tri Creeks about the impacts of logging where Eunice Creek was one of the main spawning streams in the upper McLeod River, second only to McKenzie Creek. Athabasca rainbow trout used to inhabit Wolf Creek and Carrot Creek and the headwaters of the Lobstick River, east of Edson along with Arctic grayling. The Pembina River was the southern range of the grayling, and sadly their last habitat was appropriately named Dismal Creek. The Species at Risk Act doesn't even recognize the habitats where these species have disappeared, and even biologists seem to have forgotten how much has been permanently lost."

The Sorrow of the Long Memory

(continued)

Some losses are historical in nature and mourning them is more a detached academic exercise.

In Forty Years in Canada, Sam Steele, the famous member of the NWMP, reflected on constructing Fort Saskatchewan in the spring of 1875. This was a North West Mounted Police post east of Edmonton, on the banks of the North Saskatchewan River. One of the memories was— “Our food at this time consisted of pemmican and mountain trout. The smallest trout weighed 5½ lbs., and many were over 12 lbs. These fish have a flavor quite equal to salmon, but one does not soon tire of them.”

Steele had to have been speaking of bull trout, since no other salmonids would have been present (other than mountain whitefish). One can’t imagine today’s North Saskatchewan River with monster bull trout plentiful enough to feed a construction crew!

Duncan McEachran, a veterinary surgeon, traveled in 1881 from Fort Benton, in Montana, to Calgary along the southern foothills of the Eastern Slopes in search of possible ranch locations. Not only was he stunned by the potential of the foothills grasslands to support a livestock industry, he commented on the streams that ran clear and cold and were “full of trout…which are most delicious to eat.”

Cutthroat trout were described by the NWMP in 1890 as “speckled”, or “brook” trout with, “the special mark is a red patch on each side of the throat, where it joins the mouth, and, in the fish of 12½ lbs and upwards, a reddish tinge along the belly”. In living memory there are no examples of cutthroat trout of “…12½ lbs and upwards…” Today, where they are left, cutthroat trout hang on with a tenuous grip.

Bull trout swam in the headwaters of the Rosebud River and in Carstairs Creek at least to the late 1920s. No angler today would consider fishing in these streams where the bull trout are ghosts.

This narrative touches virtually every watershed in Alberta, especially the streams and rivers of the Eastern Slopes. However, these critters keep disappearing and what it becomes is a lived memory, not just a dusty historical artifact. The list of fish populations that were damned in my lifetime is immense and stills grows.

The Sorrow of the Long Memory

(continued)

As someone who thinks fish matter, and should matter to more than fisheries biologists and anglers, I am filled with sorrow over the revelations of loss of these amazing creatures. This is of little consequence to most people, or we would have stemmed the tide of loss long ago. Fish suffer from an image problem, low public awareness and visibility, since people don't think of, or have empathy for creatures that exist in an environment foreign to our terrestrial one. It's hard to have some strong reason to be concerned about creatures that exist largely out of sight and out of mind.

In the sweep of human emotions, if fish don't come dead last, they are close to the mark. Most historical fish populations, native trout especially, have plummeted to a position of last or dead.

Can people ever develop and empathy for fish and care about their future? Should they? I would say yes, but that might be considered a biased view point, given my profession. Could the catastrophic loss of fish tell us something important?
In the terminology of species taxonomies we are Homo sapiens, literally "wise humans." It might be a presumptuous label to apply to ourselves. If we were indeed wise we would heed the ecological maxim that, "In diversity is strength." Aldo Leopold's admonishment, perhaps more direct was to warn us the first rule of ecological tinkering is don't discard any of the pieces. Fish are one of the pieces.

They are not superfluous, redundant, or unnecessary. We are not water creatures as are fish, but we are creatures of water—we are mostly water, dependent on water, and curiously blind to that liquid. Fish don't speak to us, but their presence, abundance, distribution, species assemblage, and health are simple messages telegraphed to us about the quantity and quality of water. Their declines and deaths are a distant early warning—alarms bells ringing for impacts to the water essential to our needs.

If stone-pointed tools in the hands of ancient Clovis peoples represented a technology sufficiently powerful to extinguish a band of Pleistocene species, what does the future hold with a modern civilization equipped with feller-bunchers to cultivators, bulldozers to off-highway vehicles, and synthesized chemicals to AI generated algorithms of growth?
With their specialized stone tools, it took ancient peoples several hundred years to dramatically change the species complement. We've vastly improved efficiency and it's taken us less than a century to whittle down the remaining species distribution and abundance of trout.

The Sorrow of the Long Memory

(continued)

We should grieve, for the gift of fish we had and frittered away. They were done in with selenium, sawdust, sediment, and a slew of chemical concoctions. It happened as we were digging, cutting, drilling, cultivating, damming, diverting, emitting, and consuming as if the bounty would last forever. It happened when we were more focused on what we could extract from the land and the water, instead of what we should steward for the future.

This is my sorrow for an ancient suite of aquatic species we could have cherished as indicators of the health of our watersheds and used as a report card on our ability to manage and steward the places they lived:

Sorrow is a river without a trout.

Sorrow is a river without a canopy of willows, old spruce, or cottonwoods, shading the water, gluing the banks together, and adding physical complexity to the channel.

Sorrow is a lack of a wide, vegetated riparian buffer to temper, trap, and treat the things we do to water before it gets to the river.

Sorrow is no intact forest in a river's watershed to capture, store, and slowly release water, creating a reliable flow, and moderating both floods and drought.

Sorrow is water that is too warm, too muddy, and too contaminated to drink from a river freely or offer fish safe habitats.

Sorrow is a river without a trout and the loss of a signal that could have alerted us to a need for change.

Sorrow is for change that never happened, for learning that never occurred, and for the greed, ignorance, and inaction that still rob rivers of trout.

As we ratchet up our growth expectations, continue on unsustainable pathways, and fail to adhere to ecological limits, biologists will warn us of the implications. For many biologists, the losses of wild creatures and their habitats can reach a point where one wonders if there is a limit to grieving, a point beyond endurance, where no more sorrow can be absorbed. For those who don't or won't feel the pain of ecological grief, the implications to the natural world are disturbing.

Lorne Fitch is a Professional Biologist, a retired Fish and Wildlife Biologist and a former Adjunct Professor with the University of Calgary. He is the author of Streams of Consequence, Travels Up the Creek, and Conservation Confidential.

FISH EXCLUSION SYSTEMS CLOSE TO HOME

Gary Hanke

In Montana, various fish exclusion devices are used to prevent fish from entering irrigation ditches and other water diversions, where they could become stranded and die. Standard devices include both passive and self-cleaning fish screens that use physical barriers and specific water flow to guide fish back to the main river. Standard fish exclusion devices in Montana

STANDARD FISH EXCLUSION DEVICES IN MONTANA

Self-cleaning screens
Automated screens with mechanical cleaning systems are often used for larger diversions, as they require less manual maintenance.

Cylindrical screens
These systems use cylindrical, brush-cleaned wedge-wire screens to provide a large surface area for water intake. They are designed to keep fish in the river and prevent them from being subjected to a bypass system. One such project was installed at the Intake Diversion Dam on the Yellowstone River.

Vertical panel screens
These are designed to direct fish and debris toward a bypass, returning them to the source stream. They often use rotating brushes to keep the screens clean.

Traveling screens
These are a type of moving screen that uses a mechanical cleaning system to prevent debris buildup.

Passive (static) screens
These screens rely on water pressure and flow to operate without requiring electricity, making them suitable for remote locations.

Concave screen panels
These panels, arranged in a linear array, create a self-cleaning effect using the velocity of the water. An innovative system of this type was developed for a slight, remote diversion on the Flathead Irrigation Project.

Wedge-wire screens
These screens feature V-shaped wires with narrow, precisely spaced slots that allow

water to pass while preventing fish from being sucked in. Their design can help reduce debris-related clogging.

Fish barriers
In some cases, physical barriers are used to prevent fish movement into specific areas for restoration or species protection.

Fish ladders
While primarily for passage, fish ladders can also be part of a diversion system to ensure fish can move around a structure safely.

Physical barriers
Montana Fish, Wildlife and Parks uses barrier construction as a fish removal and population management technique to protect particular species or remove invasive species.

Several factors are considered when choosing and installing a fish screen in Montana, often in consultation with Montana FWP.

Target fish species
The required screen opening size is determined by the size of the fish species that needs protection. Federal guidelines for species like the endangered pallid sturgeon, for example, dictate a very fine mesh.

Location and access
Remote locations without electricity may require passive, self-cleaning screens.

Debris loading
Streams with heavy loads of woody debris, leaves, or algae require a screen that is more resistant to clogging, such as a wedge-wire screen.

Water flow
Screen placement is optimized to leverage natural water flow and velocity to keep the screen clear and guide fish away from the intake.

Cost and maintenance
The balance between the cost of installation and the cost of maintenance is weighed against the environmental benefits of the screen.

Factors influencing cost

Scale: Large diversions or dams require significantly more expensive systems than smaller irrigation ditches.

Technology: Automated, self-cleaning screens are more expensive upfront than static, passive screens.

Location: Remote or difficult-to-access sites can increase construction and installation costs.

Infrastructure: Projects often involve more than just a screen, including bypass modifications, headgate replacements, and other water management infrastructure.

Funding structure: Costs are often split among grant programs, state funding (such as the Future Fisheries Improvement Program in Montana), and contributions from private donors and irrigators.

Example of a successful project

In 2021, a new fish screen was installed on the Lolo Ditch in Lolo Creek to prevent the loss of native bull trout and westslope cutthroat trout. The project, seen as a significant step in restoring the Bitterroot fishery, is used as an example to encourage other irrigators to install similar technology.

Details on the exact installation cost for the 2021 fish screen on the Lolo Ditch are not available in public project summaries. These costs exhibit significant variability, contingent upon the scale and intricacy of the project, including specific screen technology, location, and other related infrastructure. The Lolo Creek project was a collaborative endeavour involving both public and private funding, which is a typical approach for conservation initiatives in Montana.

Example of similar project costs (in US$).

A 2021 Montana Future Fisheries Project grant approved $30,000 for a fish screen on the Big Hole River.

Another 2021 project approved $18,340 for a fish barrier on Andrus Creek.
For comparison, projects like removing culverts for fish passage can range from $600,000 to $2,000,000 in the Pacific Northwest, though these are much larger and more complex projects than a standard irrigation screen.

The Lolo Ditch fish screen is seen as a major step toward restoring the fishery, and its success is being used to promote similar installations across the Bitterroot River basin, likely with an emphasis on securing collaborative funding.

Cows & Fish, Riparian Management Society

Dave Eaton

Since 1992 Cows and Fish, Riparian Management Society has operated as a trusted Alberta non-profit organization dedicated to helping protect and restore riparian habitats that are foundational to healthy trout populations. Using a collaborative, education-first approach, the organization provides hands-on workshops, community engagement, riparian health assessments and practical management tools for riparian and stream health. By partnering with ranchers, municipalities, Indigenous communities, watershed groups, and industry, Cows and Fish helps stakeholders make informed decisions to sustain water quality, fish and wildlife habitat, biodiversity, and the long-term resilience of the landscape. They excel at translating ecological science into accessible, visually clear messaging—helping landowners to understand how healthy riparian areas provide both enhanced sustainability to their ranches alongside viable trout fisheries.

From an ecological perspective, healthy riparian zones and clean water result in many benefits to fish. Healthy streambank vegetation promotes bank stability, less sediment input to instream fish habitats (e.g. spawning beds) and more stable flows. Abundant overhanging bank vegetation ensures more consistent, cooler water temperatures during summer heatwaves, and higher terrestrial and instream invertebrate inputs. More trout food to produce more and healthier trout!

A key strength of Cows and Fish is their trusted relationships with agricultural producers as they work in partnership to implement practical, on-the-ground actions.Nanton area rancher, Kelly Hall, captured the essence of this relationship nicely when she stated that; “Conservation and good agricultural practices are on parallel tracks.” Noreen Ambrose, Executive Director of Cows and Fish, builds on this concept, adding the following: “In my experience, ranchers have a genuine and deep seated desire to act as good stewards. Cows and Fish works to share the practical experience gleaned from their fellow ranchers and backed by science, to educate and help them realize their goals.” Working directly with cattle producers, the organization promotes voluntary stewardship practices that reduce pressure on both land and sensitive

streams. Examples include off-stream watering systems, riparian fencing, grazing management and rest-rotation, bank revegetation —all of which help maintain shaded banks, reduce trampling, and keep sediment out of streams. These techniques also restore the natural stream processes that create the pools, riffles, and undercut banks where trout can thrive.

Cows and Fish has implemented numerous excellent projects over its decades of work in Alberta. One of their most interesting current projects is the Beaver Creek Watershed Rehabilitation Project, which is working to sustain a native trout population on the edge of the foothills in southwestern Alberta. Beaver Creek traces a fine, winding line through a very busy Public Land Use Zone (PLUZ) on the east side of the Porcupine Hills. Despite the many challenges and conflicting demands inherent in complex land-use management, this tiny stream has continued to nurture a viable population of pure-strain westslope cutthroat trout. Recognizing the value and unique nature of this population, and the urgent need to protect it, a partnership between Cows and Fish, Freshwater Conservation Canada (formerly Trout Unlimited Canada), and Oldman Watershed Council was formed. This collaboration is working to maintain and restore the natural characteristics of Beaver Creek through outreach, assessment, and monitoring to support active habitat restoration and mitigate human impacts, such as recreation and grazing. Watershed improvements include upgrading and realigning an OHV bridge, installing exclusion fencing to limit OHV and cattle access to parts of the creek, channel bioengineering, off-site cattle watering systems, and bank restoration plantings. If saving this threatened population of native trout in this busy, Southern Alberta landscape is possible, imagine what else we can accomplish.

Cows and Fish's decades of stakeholder collaboration and riparian health improvement for the benefit of fish populations in Alberta nicely complements the angler-led advocacy mandate of The Trout Trust. We look forward to working with them in our ongoing efforts to protect and restore the fragile and unique habitats that support our wild trout populations.

For more information on Cows and Fish, Riparian Management Society and their many success stories, please check out the following links:

Cows and Fish has an excellent website which you can find at:

Cows & Fish: Home | Promoting healthy landscapes by fostering riparian stewardship

They also feature a number of highly educational videos on their website. I recommend starting with “Connecting Land and Water: Stories from the Eastern Slopes”, which you can find here

[View Cows & Fish]

Guest writers are welcomed to submit articles of interest for the anglers of Alberta..

Announcements

The Trout Trust Is Looking for a Membership Perks & Partnerships Lead!

We're building Alberta's strongest angler-driven conservation movement and we need someone to help shape what it means to be a Trout Trust member as we grow. This is a volunteer role for someone who loves connecting with people, supporting local fishing businesses, and building a community that takes conservation straight to the government tables where it matters.

What You'll Do:

- Reach out to Alberta fishing companies, guides, brands & shops
- Build partnerships that offer real perks to paid Trout Trust members
- Coordinate ideas like collabs, gear discounts, sticker packs, giveaways & more
- Help design and evolve our membership program
- Work alongside the founding team to bring creative engagement ideas to life

Who You Are

- Friendly, organized, and comfortable with outreach
- Passionate about Alberta's rivers and trout
- Excited to support conservation efforts
- Able to volunteer a few flexible hours each month
- No special experience needed — just energy, curiosity, and community spirit

If this sounds like you (or someone you know), send us an email:
admin@thetrouttrust.com

Let's build this movement together.